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PATENT

TRG 10759-153

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

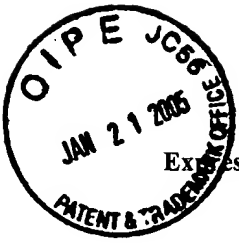
Applicant: Nykoluk, et al.	:	
	:	Art Unit: 3727
Serial No.: 09/604,995	:	
	:	Examiner: Tri M. Mai
Filed: June 28, 2000	:	
	:	
For: TOWABLE WHEELED	:	
BACKPACK	:	

TRANSMITTAL LETTER ACCOMPANYING APPEAL BRIEF

Mail Stop: Appeal Brief
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Transmitted herewith is the Appeal Brief in this application. The Commissioner is authorized to charge the \$500.00 fee for filing this Appeal Brief, pursuant to 37 CFR 1.17(f), to Deposit Account 01-2384. A duplicate copy of this transmittal letter is submitted for that purpose.

Applicant submitted previously a five month extension of time extending the period for the filing of this Appeal Brief January 23, 2005. The Notice of Appeal in this Application was mailed on June 23, 2004. This Appeal Brief is submitted within (7) seven months from the date of the Notice of Appeal (37 CFR 1.192(a)), and within the period for response afforded by the five month extension of time submitted previously.



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Date: **December 21, 2004**

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APPELLANTS' BRIEF

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The Notice of Appeal in this Application was filed on June 23, 2004, the period for response to which was extended to January 23, 2005 with the payment of a (5) five month extension of time.



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I. REAL PARTY IN INTEREST

The real party in interest in this appeal is TRG Accessories, St. Louis, MO now doing business as TRG Group, 2047 Westport Center Drive, St. Louis, MO, 63146.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences which will directly affect, or be directly affected by, or have a bearing on, the decision in this pending appeal.

III. STATUS OF CLAIMS

Presently, claims 2-9, 12-13 and 18-22 are pending in the subject application and are on appeal. Claims 1, 10-11, 14-17 and 23 have been cancelled without prejudice or disclaimer of the subject matter therein.

IV. STATUS OF AMENDMENTS

A Final Office Action was mailed March 24, 2004. In response thereto, an amendment was filed June 23, 2004, which, as indicated in the Advisory Action dated November 9, 2004, will be entered for purposes of appeal. A Request for Reconsideration was filed January 5, 2005, along with a Declaration of Inventor under 37 CFR 1.132, and Appendices A-G.

V. SUMMARY OF THE INVENTION

The following summary does not limit, in any manner whatsoever, the claim interpretation. Rather, the following summary is provided only to facilitate the Board's understanding of the subject matter of this appeal.

Claim 7 generally recites a piece of baggage, 10 that comprises a pack 12 constructed of flexible material enclosing a hollow interior (e.g., storage compartment 26) of the pack 12 (page 8, lines 8-15 of the specification). A rigid base 34 is attached to the pack 12, and wheels 32 are mounted for rotation to the base 34 (page 9, lines 4-10 of the specification). A towing member 36 is connected to the base 34 by a joint that allows pivoting movement of the towing member 36 relative to the base 34 (page 9, lines 19-22 of the specification). A backing sheet 38 is attached to the towing member 36 and to the inside of the pack 12. (page 3, lines 5-22 of the specification).

Claim 12 recites a piece of baggage 10 which may worn on the back comprising a pack 12 for receiving and carrying objects (page 8, lines 8-25 of the specification). The piece of baggage 10 includes at least two wheels 32 mounted for rotation on the pack 12 and for supporting the pack 12 when the pack 12 is being towed (page 9, lines 4-9 of the specification). The piece of baggage 10 also includes a towing handle 36 and a resiliently flexible backing sheet 38. The towing handle 36 is attached to the pack 12 by a curved telescoping member that allows the handle to be selectively extended from the pack 12 and retracted back toward the pack along an arcuate path relative to the pack, with the towing handle being attached to a single-pole

telescoping member comprised of a non-extending portion 52 and at least one extending portion 54 slideably attached to the non-extending portion 52 for relative telescoping movement of the non-extending portion 52 and extending portion 54 (page 9, lines 23-33 of the specification).

The resilient backing sheet 38 is attached to the non-extending portion 52 of the telescoping member, with the backing sheet 38 being positioned between the non-extending portion 52 of the telescoping member and a side of the pack that rests against a person's back when the pack is worn as a backpack (page 11, lines 5-22 of the specification).

Claim 18 recites a piece of baggage 10 for use as a backpack and as a handle towed piece of luggage. The piece of baggage comprises a pack 12 constructed of a flexible material enclosing a hollow interior of the pack. At least two shoulder straps attached to the pack 12 on a first side with the shoulder straps enabling a user to carry the pack 12 on their back (page 13, lines 27-32 of the specification). A rigid base 34 is attached to a bottom of the pack 12. A backing sheet 38 is attached to the first side of the pack 12 that rests against the users back when the piece of baggage is worn as a backpack, with the backing sheet and the rigid base being twistable relative to each other via the flexible material (page 14, lines 5-23 of the specification). At least two wheels 32 are mounted for rotation to the rigid base 34. A single-pole towing member 36 is operatively connected to the rigid base 34 intermediate the wheels 32. The backing sheet 38 is attached to the single-pole towing member 36 for pivoting movement of the backing sheet about the single-pole member (page 14, 5-23 of the specification).

Claim 21 recites a piece of baggage 10 having a pack 12 for receiving and carrying objects. At least two wheels 32 are mounted for rotation on the pack 12 and for supporting the

upward and forwardly from the pack and retracted back toward the pack along an arcuate path curved away from the pack. A resiliently flexible backing sheet 38 is attached to the non-extending portion 52 of the telescoping member 36 with the backing sheet 38 being positioned between the non-extending portion 52 of the telescoping member and a side of the pack 12 that rests against a persons back when the pack is worn as a backpack and where the backing sheet is attached to the side of the pack. The towing handle is attached to a single-pole telescoping member comprised of a non-extending portion 52 and at least one extending portion 54 slideably attached to the non-extending portion 52 for relative telescoping movement of the non-extending portion and the extending portion (see citations above).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 2-9, 12-13 and 18-22 stand rejected under 35 U.S.C. 102(e) as being anticipated by Mao (USP 6,279,706) (hereinafter “Mao”).

VII. ARGUMENT

MAO DOES NOT CONSTITUTE PRIOR ART.

Claims 2-9, 12-13 and 18-22 have been rejected under 35 U.S.C. 102(e) as being anticipated by Mao. It is well settled law that an inventor's own prior work will not anticipate his later invention unless that prior work is such as to constitute a statutory bar Panduit Corp. V Dennison Mfg. Co., 810 F.2d 1561, 1581, 1 USPQ2d 1593, 1608 (Fed. Cir. 1987). An applicant may eliminate a reference by showing that the reference disclosure is derived from the applicant's own work.

On January 12, 2005, Applicant submitted a Declaration of Inventor under 37 1.132 (hereafter "132 Declaration"). The 132 Declaration clearly states that the subject matter described in the Mao patent represents the work of the inventor of the present application, Cory Nykoluk. The subject matter described in the Mao patent does not represent the work of Mao. As such, the Mao patent does not constitute prior art under 35 U.S.C. 102(e).

The 132 Declaration establishes, among other things, that the subject matter of the present application was conceived in connection with a project named E-Motion 360 Collection Trek Pack (hereafter the "E-Motion project"). The assignee, TRG, of the subject application had from time to time engaged a company in Taiwan, Ting Metal Co. (hereafter "YT") to manufacture TRG products. TRG contacted YT in connection with the E-Motion project. The usual course of dealings between YT and TRG had been for TRG to transmit design drawings for each new product to YT, from which YT provided a proposal under which YT would

manufacture a new product. TRG contacted Chen Shou Mao, the president of YT, and proposed that YT manufacture a prototype for the a backpack on wheels in connection with the E-Motion project.

The 132 Declaration further establishes that the inventor of the present application, Cory Nykoluk, developed the claimed invention of the present application from mid-1999 through early 2000, while employed by TRG. Appendices A-G, attached to the 132 Declaration, provide evidentiary support for the fact that the inventor of the present application invented the claimed invention.

Appendix A of the 132 Declaration includes a series of screen shots of a directory of selected files stored on a CD. The 132 Declaration establishes that the stored files were prepared in connection with the E-Motion project. The print outs of the files at Appendix A illustrate hand sketches of a backpack having wheels attached thereto, along with a handle provided on a telescoping member (retracted into the backpack). The sketches at Appendix A further illustrate shoulder straps for a user to carry the backpack, and a shroud to cover the straps when not in use.

Appendix B of the 132 Declaration illustrates sketches prepared in connection with the E-Motion project on or before March 7, 2000 which illustrate an exploded representation of the concepts for the backpack on wheels. The sketch at Appendix B is dated March 7, 2000, well before the filing date of the Mao patent.

Appendix C illustrates a sketch made on or about May 18, 2000 illustrating the backpack on wheels concept with the telescoping handle in a retracted position, also before the filing date of the Mao patent.

Appendix E includes screen shots of a directory of selected files stored on a CD and print outs of such files which represent sketches of the back construction contemplated for the backpack on wheels. The sketches at Appendix E illustrate the back construction, including the backing sheet and shoulder straps, and were prepared on or before May 23, 2000.

Appendix F includes screen shots of a directory of files stored on a CD and print outs of the files which constitutes photographs of a prototype backpack prepared in connection with E-Motion project. The photographs were taken on or before June 26, 2000 and thus evidence that a prototype backpack was completing constructed and completed on or before June 26, 2000. As clearly stated in the 132 Declaration, the inventor of present application conceived the claimed invention of the present application at least as early as the beginning of 2000 and reduced to practice the claimed invention of the present application by building an actual working prototype before June 13, 2000. The inventor was diligent in reducing to practice the claimed invention of the present application.

In view of the clear evidence submitted in the 132 Declaration and already of record, it is submitted that the 132 Declaration establishes that, to the extent that the Mao patent describes subject matter relevant to the claimed invention of the present application, such subject matter is the work of Cory Nykoluk, not the work of Chen Shou Mao. Therefore, the Mao patent does not constitute prior art, and the claims on appeal are allowable.

CLAIM 8

It is submitted that Mao does not teach or suggest the additional limitation of claim 8 which recite the backing sheet to be attached to the towing member via a channel portion that allows the backing sheet to pivot about the towing member. In the Final Office Action, an

unlabeled component in Figure 6 of the Mao patent (between portions 20 and 30) is cited as allegedly constituting the claimed resilient flexible backing sheet. While the claimed backing sheet of independent claim 7 is recited broadly, claim 8 further adds the limitation that the backing sheet be attached to the towing member via a channel portion that allows the backing sheet to pivot about the towing member. In the text of the Mao patent (having a detailed description of only five paragraphs), item 20 is labeled “luggage” and item 30 is labeled “pull rod frame.” The Mao patent describes the luggage 20 to include a base 23 which is provided in the center of a pivoting seat 24 for mounting pivotally a pull rod frame 30. The luggage 20 is provided at the top with a locating piece 25 for locating an arcuate pull rod 31 (column 1, lines 60-column 2, line 5 of Mao). The pull rod frame 30 is enclosed in a fabric jacket 35 which is fastened to the inside wall of the luggage 20 (column 2, lines 18-20 of Mao). Neither the foregoing discussion of Mao, nor any other written text or graphical illustrations within Mao teach or suggest the channeled portion of claim 8.

For reasons set forth above, it is respectfully submitted that the Mao patent does not constitute prior art against the claims of the present application. With respect to claim 8, it is further submitted that the Mao patent does not teach or suggest the additional limitations of claim 8.

For reasons set forth above, it is respectfully submitted that the Mao patent does not constitute prior art against the claims of the present application. With respect to claim 8, it is further submitted that the Mao patent does not teach or suggest the additional limitations of claim 8.

Accordingly, applicant respectfully requests that the final rejection be withdrawn, and the pending claims allowed. A favorable action is respectfully requested.

Respectfully submitted,



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VIII. APPENDIX OF CLAIMS INVOLVED IN THE APPEAL

2. The piece of baggage of claim 7, wherein:

the towing member is connected to the bases for pivoting movement of the towing member in a multiple of planes relative to the base.

3. The piece of baggage of claim 2, wherein:

the joint comprises a ball-and-socket joint.

4. The piece of baggage of claim 7, wherein:

the towing member is curved and is connected to the base intermediate the at least two wheels.

5. The piece of baggage of claim 7, wherein:

the towing member is comprised of at least two portions that telescope so as to allow the towing member to extend and retract in a telescoping manner.

6. The piece of baggage of claim 5, wherein:

the two portions of the towing member are curved.

7. A piece of baggage comprising:

a pack constructed of flexible material, the flexible material enclosing a hollow interior of the pack;

a rigid base attached to the pack;

at least two wheels mounted for rotation to the rigid base;

a rigid towing member connected to the base by a joint, said joint allowing pivoting movement of the towing member relative to the base; and

a resiliently flexible backing sheet attached to the towing member for movement of the backing sheet with the towing member relative to the base, the backing sheet also being attached to the inside of the pack.

8. The piece of baggage of claim 7, wherein:

the backing sheet is attached to the towing member via a channel portion that allows the backing sheet to pivot about the towing member.

9. The piece of baggage of claim 7, wherein:

the extendable towing member is comprised of a single-pole telescoping member.

12. A piece of baggage which may be worn on the back comprising:

a pack for receiving and carrying objects;

at least two wheels mounted for rotation on the pack and for supporting the pack when

the pack is being towed;

a towing handle attached to the pack by a curved, telescoping member, the telescoping member allowing the handle to be selectively extended from the pack and retracted back toward the pack along an arcuate path relative to the pack, the towing handle being attached to a single-pole, telescoping member comprised of a non-extending portion and at least one extending portion slideably attached to the non-extending portion and at least one extending portion slideably attached to the non-extending portion for relative telescoping movement of the non-extending portion and the extending portion; and

a resiliently flexible backing sheet attached to the non-extending portion of the telescoping member, the backing sheet being positioned between the non-extending portion of the telescoping member and a side of the pack that rests against a person's back when the pack is worn as a backpack, the backing sheet also being attached to the side of the pack.

13. The piece of baggage of claim 12, wherein:

the backing sheet is attached to the non-extending portion of the telescoping member via a channel portion that allows the backing sheet to pivot about the non-extending portion of the telescoping member.

18. A piece of baggage for use as a backpack and as a hand towed piece of luggage, the piece of baggage comprising:

a pack constructed of a flexible material, the flexible material enclosing a hollow interior

of the pack;

at least two shoulder straps attached to said pack on a first side, said shoulder straps enabling a user to carry said pack on their back;

a rigid base attached to a bottom of the pack;

a backing sheet attached to said first side of the pack that rests against the user's back when the piece or baggage is worn as a backpack, the backing sheet and the rigid base being twistable relative to each other via the flexible material;

at least two wheels mounted for rotation to the rigid base;

a single-pole towing member operatively connected to the rigid base intermediate the at least two wheels; and

the backing sheet is attached to the single-pole towing member for pivoting movement of the backing sheet about the single pole member.

19. The piece of baggage of claim 18, wherein:

the single-pole towing member is attached to the rigid base by a pivot connection enabling the single-pole towing member to pivot relative to the base.

20. The piece of baggage of claim 18, wherein:

the single-pole towing member is curved and telescopes in an arcuate path between extended and retracted positions relative to the pack.

21. A piece of baggage comprising:

a pack for receiving and carrying objects;

at least two wheels mounted for rotation on the pack and for supporting the pack when the pack is being towed; and

a towing handle attached to the pack by a curved telescoping member, the telescoping member allowing the handle to be selectively extended upwardly and forwardly from the pack and retracted back toward the pack along an arcuate path curved away from the pack;

a resiliently flexible backing sheet attached to the non-extending portion of the telescoping member, the backing sheet being positioned between the non-extending portion of the telescoping member and a side the pack that rests against a person's back when the pack is worn as a backpack, the backing sheet also being attached to the side of the pack;

wherein the towing handle is attached to a single-pole, telescoping member comprised of a non-extending portion and at least one extending portion slidably attached to the non-extending portion for relative telescoping movement of the non-extending portion and the extending portion.

22. The piece of baggage of claim 21, wherein:

the backing sheet is attached to the non-extending portion of the telescoping member in a manner that allows the backing sheet to pivot about the non-extending portion of the telescoping member.

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IX. APPENDIX OF DECLARATION OF INVENTOR UNDER 37 CFR 1.132

(WITH ACCOMPANYING APPENDICES A-G)



Express Mail No.: EV 59338054 US

PATENT
Attorney Docket No. 10759-153

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Nykoluk, et al.

Serial No.: 09/604,995

Filed: June 28, 2000

For: TOWABLE WHEELED
BACKPACK

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: Art Unit: 3727
:
: Examiner: Tri M. Mai
:
:
:

DECLARATION OF INVENTOR UNDER 37 CFR 1.132

Mail Stop: AF
Commissioner for Patents
P.O. Box 1450
Washington, D.C. 20231

I, Cory O. Nykoluk declare and state as follows:

1. I have reviewed and understand the specification, drawings and claims (both original and presently pending) of U.S. Application 09/604,995 (hereafter "the '995 application").
2. I am the original, first and sole inventor of the invention(s) recited in the claims of the '995 application (hereafter "Claimed Invention").
3. I have reviewed and understand the subject matter described and claimed in U.S. Patent 6,279,706 to Chen Shou Mao, titled "Pull rod of Luggage Capable Carried on One's Back" issuing August 28, 2001 from application serial number 09/593,301 filed on June 13, 2000 (hereafter "the '706 patent").
4. To the extent that the '706 patent includes subject matter that relates to the Claimed Invention of the '995 application, Chen Shou Mao, the individual named as the inventor on the '706 patent, did not invent, and did not provide any inventive contribution to, such subject matter.
5. To the extent that the '706 patent includes subject matter that relates to the Claimed Invention of the '995 application, Chen Shou Mao derived and copied such subject matter from me.
6. The '706 patent does not constitute prior art against the Claimed Invention in the '995 application because the subject matter of the '706 patent, that relates to the Claimed Invention of the '995 application, describes my work, not the work of another person.

FACTS AND DOCUMENTARY EVIDENCE

7. Factual evidence proving that the '706 patent describes my work, not the work of another person, can be found in the attached documents (Appendices A-G), as well as in the "Notice in Accordance with MPEP 2001,06(c) of Related Litigation" filed on or about October 31, 2002 in the '995 application and the "Declaration of Prior Invention in the United States to Overcome Cited Patent" filed on or about December 1, 2003 in the '995 application.
8. On information and belief, a Notice in Accordance with MPEP 2001.06(c) of Related Litigation was filed on October 31, 2002 in the parent '995 application with the U.S. Patent Office, along with a copy of a Complaint from a lawsuit filed on September 19, 2002 in the United States District Court for the Eastern District of Missouri between TRG Accessories, LLC and Chen Shou Mao (hereafter the "Complaint").
9. On information and belief, a Declaration of Prior Invention in the United States to Overcome Cited Patent (37 CFR 1.131) was filed on December 1, 2003 in the '995 application with the U.S. Patent Office (hereafter the "Declaration of Prior Invention").
10. I have reviewed the Declaration of Prior Invention and the Complaint and I continue to agree with the facts stated therein.
11. The Complaint (a copy of which is attached at Appendix D) sets forth the following facts which I agree with and believe to be true:
 - A. TRG Accessories (hereafter "TRG") is the assignee of the '995 application and was my employer at the time that I invented the subject matter of the '995 patent.
 - B. On information and belief, Chen Shou Mao was the president of Yung Ting Metal Co., Ltd (hereafter "YT"), which was organized and existed under the laws of Taiwan.
 - C. On information and belief, YT had manufactured, at TRG's direction, hardware used in TRG products, including trolley and handle systems, wheel systems, tubing, screws, etc.
 - D. On information and belief, the usual course of dealings between YT and TRG had been for TRG to transmit design drawings for each new product to YT, from which YT provided a proposal in accordance with which YT would manufacture the new product.
 - E. I developed the Claimed Invention of the '995 application from mid-1999 through early 2000, while employed by TRG in connection with a project named E-Motion 360° Collection Trek Pack (hereafter "E-Motion project").

- F. On information and belief, on or about November of 1999, the first prototype from the E-Motion project was manufactured by Modeltech, Inc.
- G. On information and belief, sometime after December of 1999, TRG contacted Chen Shou Mao and proposed that YT manufacture a second prototype in connection with the E-Motion project, at which time TRG transmitted to YT design drawings of the prototype for the E-Motion project.
- H. On information and belief, sometime between the delivery of the second prototype by YT to TRG and June 2000, TRG contacted YT and proposed that YT manufacture a commercial product in accordance with the E-Motion project. The proposal was e-mailed to YT and, consistent with the parties prior course of dealings, included the design drawings of the product associated with the E-Motion project.
- I. On June 13, 2000, unknown to TRG, YT filed U.S. patent application 09/593,301 (now the '706 patent), which claims the invention that was embodied in the product associated with the E-Motion project.
- J. On June 28, 2000, TRG filed the parent '995 application and on March 21, 2002, TRG filed the '995 application, both of which claim invention(s) associated with the E-Motion project.
- K. Chen Shou Mao did not make any inventive contribution to the inventions embodied in and arising from E-Motion project that are now claimed in the '995 application.
12. Appendix A attached hereto includes a series of screen shots of a directory of selected files stored on a CD storing several files prepared in connection with the E-Motion project. Appendix A also includes print-outs of the selected files from the E-Motion project CD.
- A. In Appendix A, the screen shot on page 2, shows a CD titled "e-motion.sketchb" which represents a collection of documents prepared in connection with conception and development of the E-Motion project.
- B. The CD includes a sub-folder labeled "transformation_" that has a sub-sub-folder labeled "round.2".
- C. The sub-sub-folder "round.2" includes certain files, for which the screen shot shows file name, size, type and date last modified.
- D. The files titled "Untitled-1.tif", "Untitled-2.tif", "Untitled-3.tif", "Untitled-4.tif", and "Untitled-5.tif" were last modified on or before December 21, 1999.
- E. In the screen shot on page 2 of Appendix A, the TIF file titled "Untitled-2.tif" is highlighted and the content of the TIF file appears on page 3 of Appendix A.

F. In the screen shot on page 4 of Appendix A, the TIF file titled "Untitled-3.tif" is highlighted and the content of the TIF file appears on page 5 of Appendix A.

G. In the screen shot on page 6 of Appendix A, the TIF file titled "Untitled-4.tif" is highlighted and the content of the TIF file appears on page 7 of Appendix A.

H. In the screen shot on page 7 of Appendix A, the TIF file titled "Untitled-5.tif" is highlighted and the content of the TIF file appears on page 8 of Appendix A.

I. The sketches on pages 3, 5, 7 and 9 of Appendix A were prepared on or before December 21, 1999, and illustrate my concept for the backpack on wheels with a handle attached to a telescoping arm (retracted within the backpack).

13. Appendix B attached hereto represents a sketch prepared in connection with the E-Motion project on or before March 7, 2000, which illustrates an exploded representative of my concepts for a backpack on wheels having a rigid base for the backpack, as well as wheels to be mounted to the base, a single-pole curved telescoping arm to be mounted to the base, and a lower end of the telescoping member pivotally attaches to the base through a ball and socket joint.

A. Throughout the early part of 2000, TRG and YT exchanged several documents, including email, sketches, design drawings and other documents, related to my concepts for the E-Motion project. The sketch at Appendix B was one such document that TRG and YT exchanged on or about March 7, 2000.

B. Prior to preparation of the sketch in Appendix B, I conceived of the concepts shown in Appendix B including, among other things, a backpack with i) wheels mounted to a base of the backpack, ii) a single-pole curved telescoping arm mounted to the base, and iii) a lower end of the telescoping member pivotally attaches to the base.

C. The upper left corner of the sketch at Appendix B includes the notations "ATTN: Jevons", "From Cory", "Date: 7 Mar 00" indicating that I sent the sketch on or about March 7, 2000 to an individual named Jevons who at that time worked at YT under Chen Shou Mao's direction. I provided detailed directions, on an on-going basis, to Chen Shou Mao and others at YT regarding how to implement the Claimed Invention of the '995 application.

14. Appendix C attached hereto sets forth a sketch made on or about May 18, 2000.

A. The sketch at Appendix C illustrates the backpack on wheels concept for a 22 inch bag when properly fitted on a person. The sketch at Appendix C illustrates the telescoping member in the retracted position.

B. In the sketch at Appendix C, the indicia "18 May 2000 CN" represent my initials (CN) and the date on which the sketch was prepared.

15. Appendix E attached hereto sets forth screen shots of a directory of selected files stored on the CD (referenced above in connection with Appendix A) storing several files prepared in connection with the E-Motion project. Appendix E also include print-outs of selected files from the E-Motion project CD.

A. In Appendix E, the screen shot on page 2, shows the CD titled "e-motion.sketchb" that includes a sub-folder labeled "back.construction" representing the construction of the portion of the backpack that contacts the back of the person wearing the backpack.

B. The sub-folder "back.construction" includes a sub-folder titled "study.2" that contains several files, some of which have an EPS file type, and were last modified on or before May 23, 2000.

C. Pages 3, 5, 7, 9 and 11 of Appendix E illustrate the content of the EPS files titled "back.exploded.eps", "back.straps.eps", "back.together.eps", "strap.a.eps", and "strap.b.eps", respectively.

D. Page 3 of Appendix E represents an exploded sketch of the components forming the backing layer of the E-Motion project backpack.

E. Page 5 of Appendix E represents a sketch of a shoulder strap configuration for the E-Motion project backpack.

F. Page 7 of Appendix E represents a sketch of the backing layers joined together with the E-Motion project backpack having wheels.

G. Page 9 of Appendix E represents a sketch of a shoulder strap configuration for the E-Motion project backpack.

H. Page 11 of Appendix E represents a sketch of another shoulder strap configuration for the E-Motion project backpack.

16. Appendix F attached hereto sets forth screen shots of another directory of selected files stored on the CD (referenced above in connection with Appendix A) prepared in connection with the E-Motion project. Appendix F also includes print-outs of selected files from the E-Motion project CD.

A. In Appendix F, the screen shot on page 2, shows the CD titled "e-motion.sketchb" that includes a sub-folder labeled "photos.pix" representing photographs of a completed prototype backpack prepared in connection with the E-Motion project.

B. The folder "photo.pix" includes three files titled "TRG_#13_Webmeesenger1.jpg", "TRG_#13_Webmeesenger2.jpg", and

"TRG_#13_Webmessenger3.jpg", all of which have a JPEG Image file type and were last modified on or before June 26, 2000.

C. Pages 3, 5, and 7 of Appendix F illustrate black and white printouts of the photos stored in the JPEG files titled "TRG_#13_Webmessenger1.jpg", "TRG_#13_Webmessenger2.jpg", and "TRG_#13_Webmessenger3.jpg", respectively.

D. As shown at each of pages 3, 5 and 7 of Appendix F, the prototype backpack for the E-Motion project was completed and reduced to practice by June 26, 2000, including wheels and a single-pole curved arm with a T-shaped handle on the end thereof.

17. I conceived the Claimed Invention of the '995 application at least as early as the beginning of 2000.

18. I reduced to practice the Claimed Invention of the '995 application by building an actual working prototype before June 13, 2000.

19. Following conception, I was diligent in reducing to practice the Claimed Invention of the '995 application.

20. As further evidence of conception, diligence and reduction to practice before June 13, 2000, attached is appendix G that illustrates a project timeline and the design work in process for the E-Motion project also referred to as the backpack on wheels (abbreviated BPOW).

A. As set forth in Appendix G, the second prototype was scheduled to be started and finished in April of 2000, while the third prototype was scheduled to be started and finished in May of 2000.

B. On information and belief, the first prototype was completed before June 13, 2000 and before starting the second prototype.

C. On information and belief, the second and third prototypes were finished before June 13, 2000.

21. As shown by the attachments, above statements, Complaint, and Declaration of Prior Invention, to the extent that subject matter described in the '706 patent relates to the Claimed Invention of the '995 application, such subject matter is my work, not the work of Chen Shou Mao.

22. As shown by the attachments, above statements, Complaint, and Declaration of Prior Invention, to the extent that subject matter described in the '706 patent relates to the Claimed Invention of the '995 application, Chen Shou Mao copied and derived such subject matter from my work that was provided to YT by TRG.

DECLARATION

23. As the person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application and any patent issued thereon.

SIGNATURE

SOLE INVENTOR

Full Name: Cory O. Nykoluk

Signature: Cory O. Nykoluk

Date: 23 DEC 2004

Residence: 115 CROFTON CIR. CT., BALLWIN, MO 63021 USA

Citizenship: US

Post Office Address: 115 CROFTON CIR. CT., BALLWIN MO 63021 U.S.A.

The following are attached and made a part hereof:

Attachment A: December 21, 1999 backpack sketches.

Attachment B March 7, 2000 sketch of handle assembly.

Attachment C: May 18, 2000 sketch of backpack assembly.

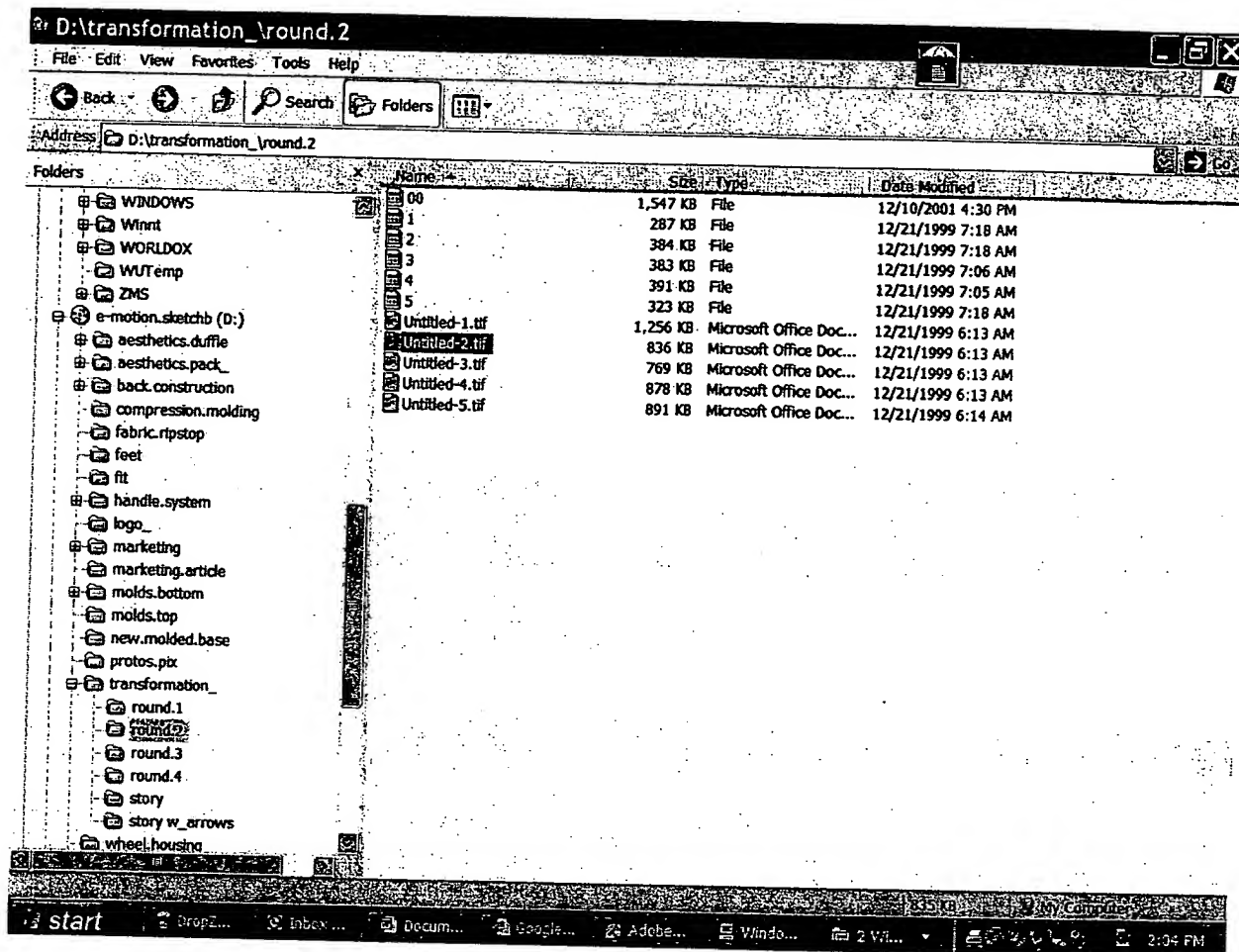
Attachment D: Complaint from a lawsuit filed on September 19, 2002 in the United States District Court for the Eastern District of Missouri between TRG Accessories, LLC and Chen Shou Mao.

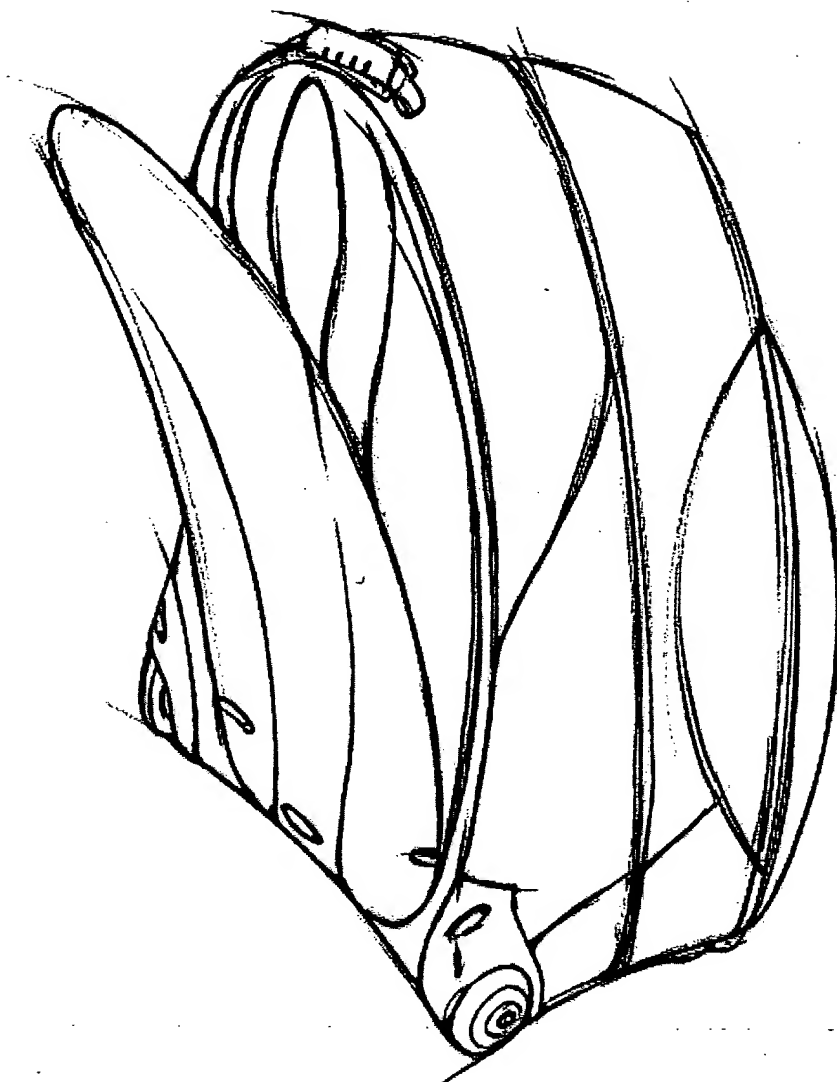
Attachment E: Sketches of back construction (study 2).

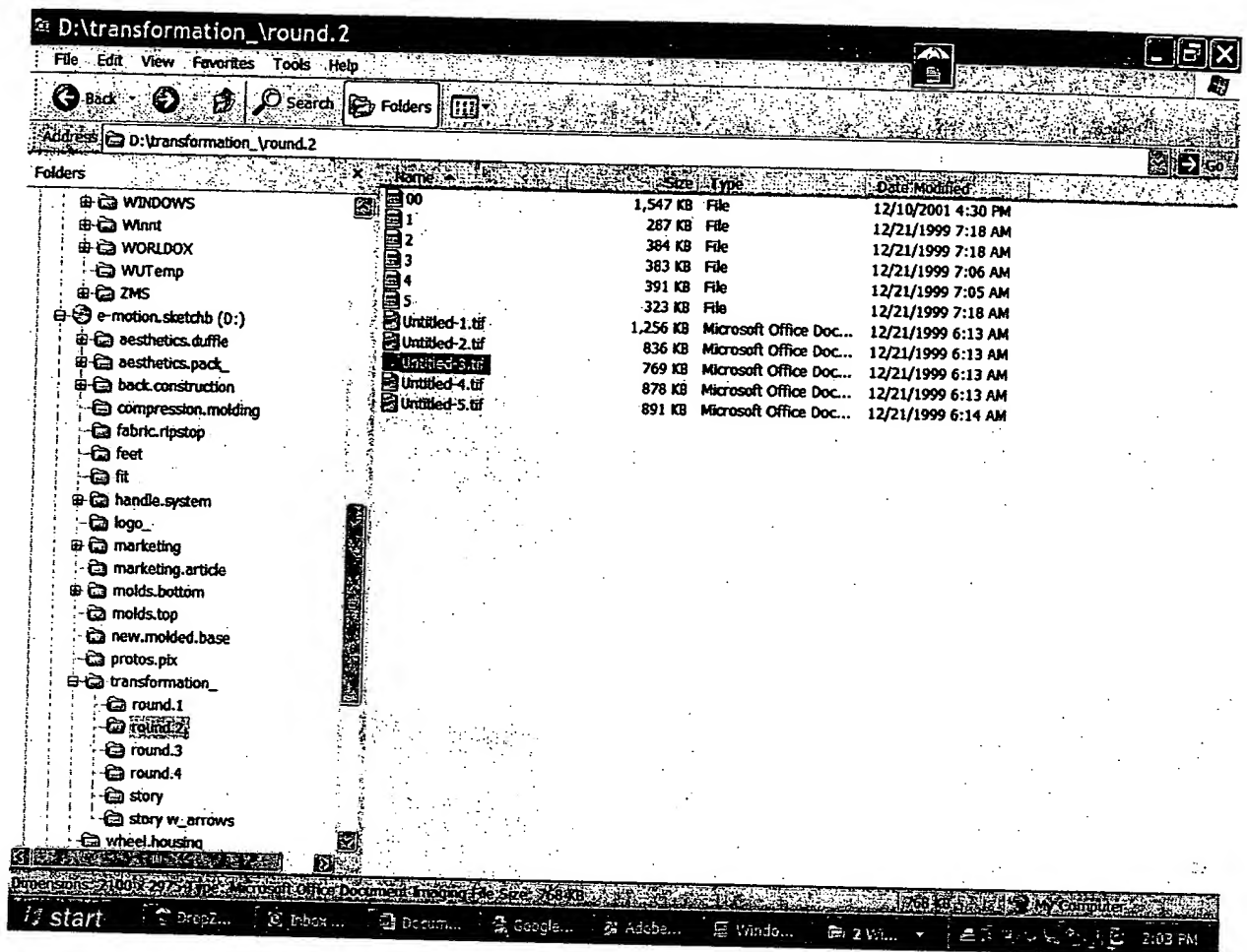
Attachment F: June 26, 2000 Photos of prototype backpack.

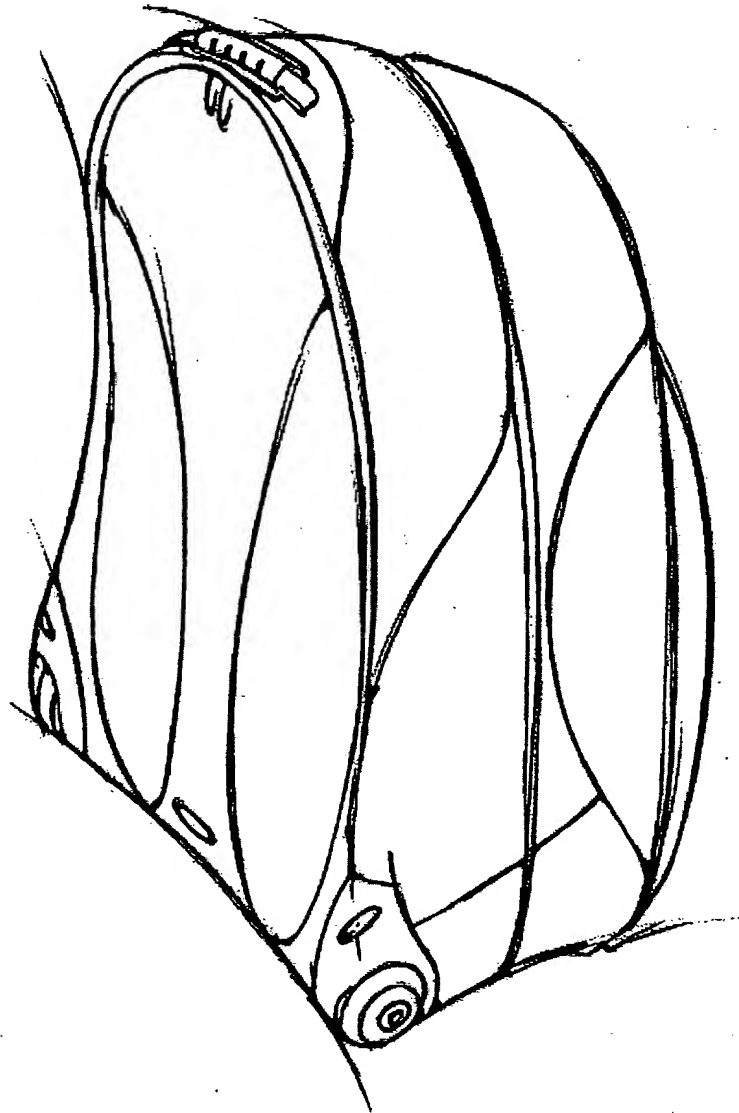
Attachment G: April to August 2000 Project timeline for backpack on wheels project.

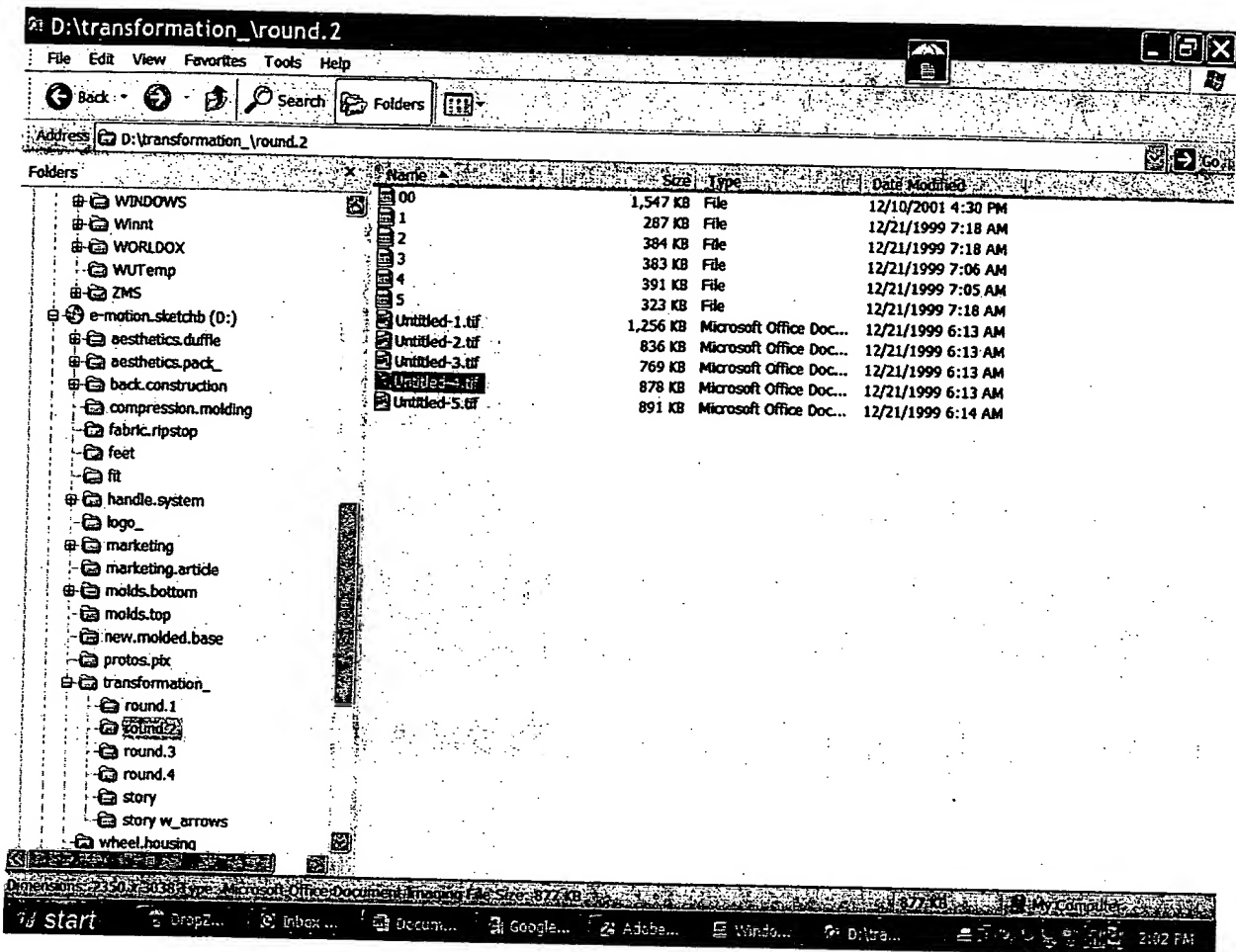
APPENDIX A



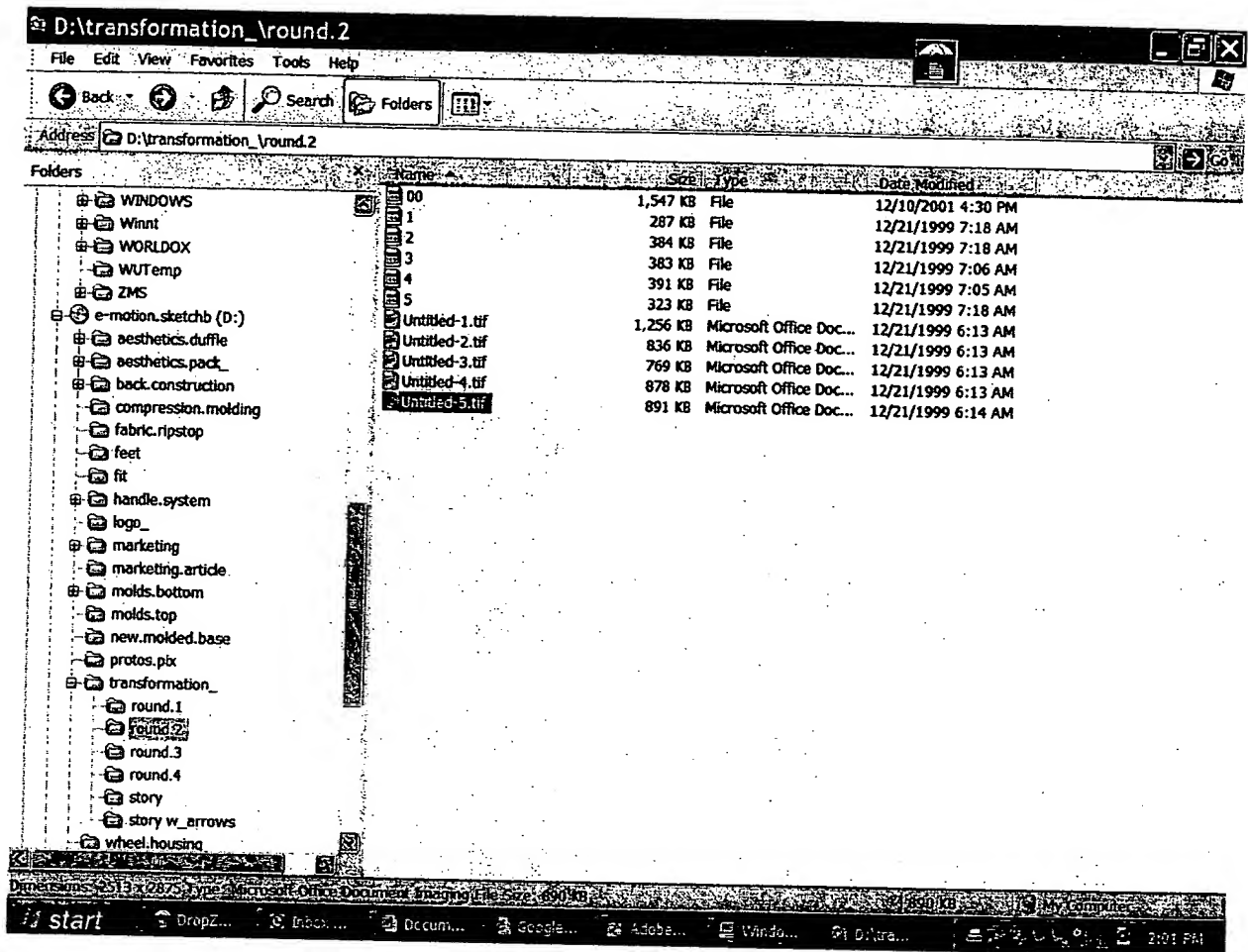


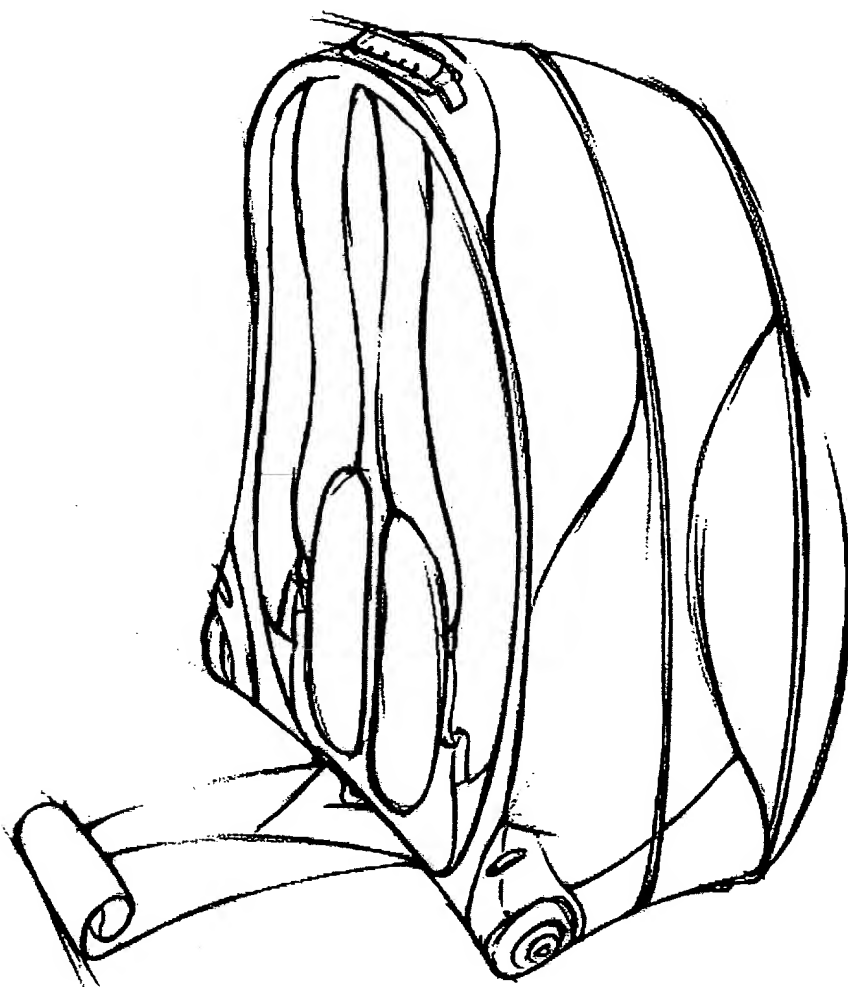










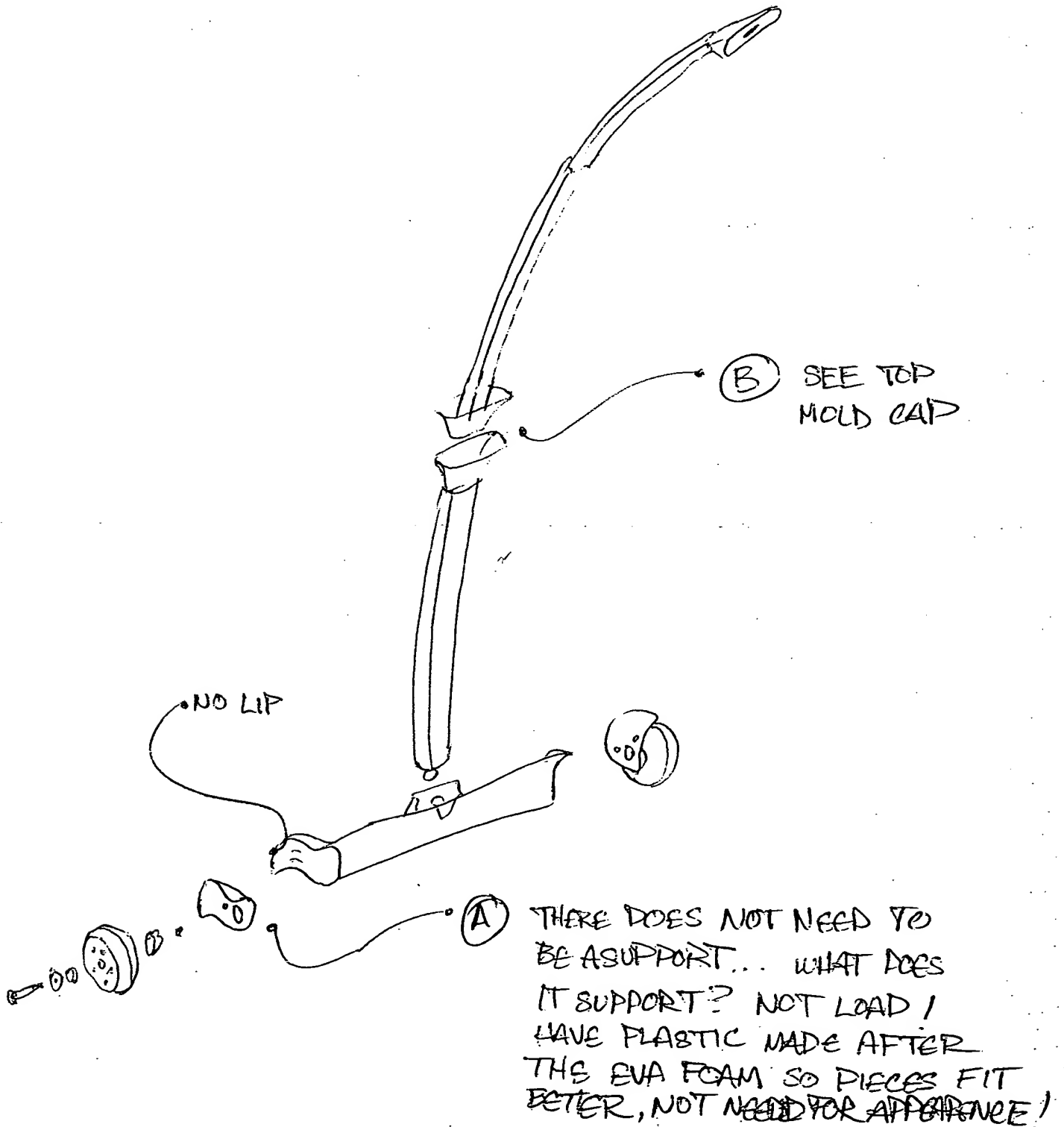


APPENDIX B

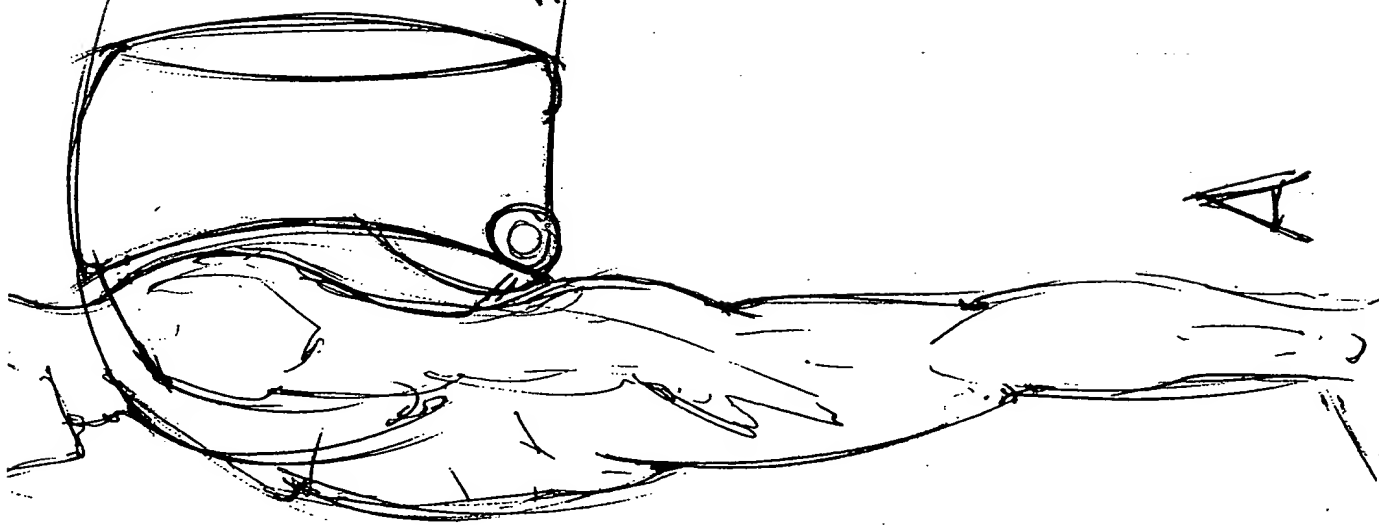
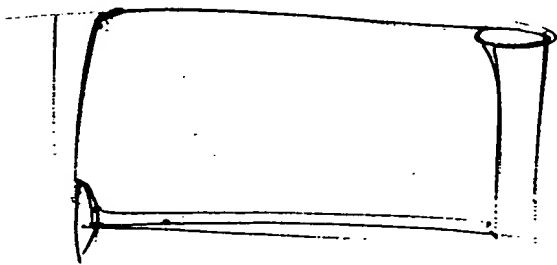
ATTN: JEVONS

FROM: CORY—

DATE: 7-MAR-00



APPENDIX C



CORRECT FIT

22" HANDLE SYSTEM ON 22" CASE

A

18 MAY 2000 CN -

APPENDIX D

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Nykoluk, Cory O.

Appln. No. 10/103,033

Art Unit: 3727

Filed: 21 March 2002

Examiner: Tri M Mai

For: TOWABLE WHEELED BACKPACK

Docket No.: 26/1143US(1)

Via Facsimile
Assistant Commissioner for Patents
Washington, D.C. 20231

Notice In Accordance with MPEP 2001.06(c) of Related Litigation

Sir:

Applicant wishes to bring to the attention of the Patent Office that the subject matter of the above referenced application could be considered to currently be involved in litigation (styled TRG Accessories, LLC v. Chen Shou Mao, Civil Action No. 4:02CV-01424-CAS in the United States District Court for the Eastern District of Missouri, Eastern Division).


The Complaint in the referenced litigation which is attached hereto, among other things, seeks correction of the inventorship of United States Patent 6,279,706 ('706 patent) to both eliminate the original inventor, Chen Shou Mao, and add the inventor, Cory Nykoluk, who is the inventor of the above referenced application. A petition has previously been filed seeking interference between the '706 patent and the above referenced application.

Applicant believes no fees are due in conjunction with this filing, however, the Commissioner is authorized to charge any deficiencies necessary for this filing, including any claims fees and/or extension fees to/from our **Deposit Account No. 50-0975**.

If any questions remain, Applicant respectfully requests a telephone call to the below-
signed attorney at (314) 444-7600.

Respectfully submitted,
Lewis, Rice & Fingersh, L.C.

Dated: October 31, 2002


Kirk A. Damman
Registration No. 42,461
Attorney for Applicants

Customer Number: 22822
Lewis, Rice and Fingersh, L.C.
Attn: Box IP Dept.
500 N. Broadway, Suite 2000
St. Louis, MO 63102-2147
Tel: (314) 444-7600
Fax: (314) 444-7788

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MISSOURI

FILED

SEP 19 2002

U. S. DISTRICT COURT
EASTERN DISTRICT OF MO

TRG ACCESSORIES, LLC,

Plaintiff,

v.

CHEN SHOU MAO,

Serve:

John S. Egbert
Harrison & Egbert
412 Main Street, 7th Floor
Houston, TX 77002

Defendant.

Civil Action No.

JURY TRIAL DEMANDED

4:0207124CAS

COMPLAINT

COMES NOW Plaintiff, TRG Accessories, Inc. ("TRG"), by and through its attorneys,
and for its Complaint against the above-named Defendant, states as follows:

PARTIES

1. Plaintiff TRG Accessories, Inc. is a corporation organized and existing under the laws of the State of Missouri, with its principal place of business located at St. Louis, Missouri.
2. Defendant Mao is the president of Yung Ting Metal Co., Ltd. ("YT"), which, upon information and belief, is organized and existing under the laws of Taiwan, with offices in Taiwan.
3. Upon information and belief, Defendant Mao is a citizen or subject of a foreign state.

JURISDICTION AND VENUE

4. This Court has jurisdiction over the subject matter of these claims pursuant to 28 U.S.C. § 1331, 1338 and 1367, as related claims arising under the federal law and the common law of Missouri. An alternative basis for jurisdiction for Plaintiff's Missouri common law claims is 28 U.S.C. § 1332(a)(2), because the matter in controversy exceeds \$75,000 and is between a citizen of the state of Missouri and foreign subjects.
5. Venue is proper under 28 U.S.C. § 1391(d).

FACTS COMMON TO ALL COUNTS

6. Plaintiff TRG is in the business of developing and marketing luggage and travel accessories. Plaintiff is an innovator in this field.
7. Defendant, president of YT, is in the business of manufacturing luggage and travel accessories.
8. Since February 1999, YT has manufactured, at Plaintiff's direction, almost all of the hardware used in Plaintiff's products, including trolley and handle systems, retractable wheel systems, tubing, screws, etc.
9. The usual course of dealing between Plaintiff and Defendant has been for Plaintiff to transmit design drawings to Defendant in connection with Plaintiff's proposal that YT manufacture one of the Plaintiff's products. The design drawings are provided to Defendant only to enable him to accept or reject Plaintiff's proposal and, if accepted, to manufacture the product. Aside from the design drawings of the E-Motion 360° Collection Trek Pack invention, Defendant has, to Plaintiff's knowledge, always respected the propriety of Plaintiff's design drawings.

10. From mid-1999 through early 2000, Cory Nykoluk, while employed by Plaintiff, developed the E-Motion 360° Collection Trek Pack, an innovative piece of luggage which can be comfortably carried on a person's back or in tow.
11. In or about November 1999, the first prototype of the E-Motion 360° Collection Trek Pack invention was manufactured by Modeltech, Inc.
12. Sometime around December 1999, Plaintiff contacted the Defendant and proposed that YT manufacture a second prototype of the E-Motion 360° Collection Trek Pack invention. Plaintiff transmitted the design drawings of the prototype to Defendant. Defendant manufactured the prototype and delivered it to Plaintiff.
13. Sometime between the delivery of the prototype by Defendant and June 2000, Plaintiff contacted the Defendant and proposed that Defendant manufacture a commercial version of the E-Motion 360° Collection Trek Pack invention. The proposal was e-mailed to Defendant and, consistent with the parties' prior course of dealings, included the design drawings of the E-Motion 360° Collection Trek Pack. The design drawings were included for the purposes of allowing Defendant to determine whether to accept the proposal and, if accepted, to enable the product's manufacture. Defendant accepted the proposal and manufactured the E-Motion 360° Collection Trek Pack for Plaintiff.
14. On June 13, 2000, unbeknownst to Plaintiff, Defendant filed U.S. Patent Application No. 09/593,301, which claims Plaintiff's E-Motion 360° Collection Trek Pack invention.

15. On June 28, 2000, Plaintiff filed U.S Patent Application No. 09/604,995, which claims the E-Motion 360° Collection Trek Pack invention. Mr. Nykoluk has assigned his rights in the E-Motion 360° Collection Trek Pack invention to Plaintiff. Such assignment was duly recorded in the United States Patent & Trademark Office at Reel 10931, Frame 305.
16. The sole basis for Defendant's patent application was the design drawings e-mailed to him by Plaintiff.
17. Defendant did not contribute anything to the development of the E-Motion 360° Collection Trek Pack invention.
18. Cory Nykoluk is the true and only inventor of the E-Motion 360° Collection Trek Pack.
19. On August 28, 2001, the PTO issued Patent No. 6,279,706 to Defendant (hereafter "the '706 patent"). A copy of the '706 patent is attached hereto as Ex. A.
20. Defendant also obtained patents in Taiwan (No. 180967) and China (No. ZL00209989.6) which claim Plaintiff's E-Motion 360° Collection Trek Pack invention.
21. Upon information and belief, Defendant has sold embodiments of Plaintiff's E-Motion 360° Collection Trek Pack invention to at least two Canadian companies, which have offered the same for sale in the United States.

COUNT I

(Correction of Inventorship of U. S. Patent 6,279,706
to eliminate Chen Shou Mao as inventor)

22. Plaintiff restates, realleges and incorporates by reference paragraphs 1-21 as if fully set forth herein.
23. 35 U.S.C. § 256 provides that a court may order a patent corrected “[w]henever through error a person is named in an issued patent as the inventor”.
24. Defendant Chen Shou Mao is currently named as the inventor of the ‘706 patent.
25. Defendant did not contribute in any way to the development of the E-Motion 360° Collection Trek Pack, the invention claimed in the ‘706 patent.
26. It was error for Defendant to be named as the inventor of the ‘706 patent.

COUNT II

(Correction of Inventorship of U. S. Patent 6,279,706
to add Cory Nykoluk as inventor)

27. Plaintiff restates, realleges and incorporates by reference paragraphs 1-26 as if fully set forth herein.
28. 35 U.S.C. § 256 provides that a court may order a patent corrected “[w]henever...through error an inventor is not named in an issued patent and such error arose without any deceptive intention”.
29. Cory Nykoluk is not currently a named inventor of the ‘706 patent.
30. Cory Nykoluk is the true and only inventor of the ‘706 patent.
31. It was error for Cory Nykoluk not to be named as the inventor of the ‘706 patent.
This error was not the result of any deceptive intent on Plaintiff’s part.

COUNT III

(Breach of Confidence and Misappropriation of Trade Secret)

32. Plaintiff restates, realleges and incorporates by reference paragraphs 1-31 as if fully set forth herein.
33. Cory Nykoluk is solely responsible for the innovative design of the E-Motion 360° Collection Trek Pack.
34. The design of the E-Motion 360° Collection Trek Pack represents information that can be used in the operation of a business that is sufficiently valuable and secret to afford Plaintiff an economic advantage over others. As such, the E-Motion 360° Collection Trek Pack information and design drawings constituted a trade secret.
35. Sometime prior to June 2000, Plaintiff proposed that Defendant manufacture for Plaintiff the E-Motion 360° Collection Trek Pack. The proposal included Plaintiff's design drawings of the E-Motion 360° Collection Trek Pack.
36. Plaintiff included the design drawings of the E-Motion 360° Collection Trek Pack for the purposes of enabling Defendant to respond to the proposal and, if agreement was reached, to manufacture the E-Motion 360° Collection Trek Pack for the Plaintiff. The parties agreed and understood that the design drawings were not to be used by the Defendant for any other purposes.
37. The parties agreed and understood that the design drawings were disclosed on a strictly confidential basis.
38. As a result of the parties' agreement and understanding of the confidentiality of the design drawings, Defendant owed Plaintiff a duty of confidence with respect to Plaintiff's E-Motion 360° Collection Trek Pack trade secret.

39. As a result of the prior course of dealing between the parties, during which Defendant had maintained the confidentiality of Plaintiff's design drawings with respect to Plaintiff's other products, Plaintiff was reasonable in inferring that Defendant would hold in confidence Plaintiff's E-Motion 360° Collection Trek Pack trade secret and not use it for any other purpose. As a result, Defendant owed Plaintiff a duty of confidence with respect to the E-Motion 360° Collection Trek Pack trade secret.
40. Under the circumstances of Plaintiff's disclosure of its E-Motion 360° Collection Trek Pack trade secret to Defendant, Defendant knew or had reason to know that such disclosure was intended to be in confidence. As a result, Defendant owed Plaintiff a duty of confidence with respect to Plaintiff's trade secret.
41. Under the circumstances of Plaintiff's disclosure of its E-Motion 360° Collection Trek Pack trade secret to Defendant, Plaintiff was reasonable in inferring that Defendant had consented to an obligation of confidentiality. As a result, Defendant owed Plaintiff a duty of confidence with respect to the E-Motion 360° Collection Trek Pack trade secret.
42. Subsequent to Plaintiff's disclosure of its E-Motion 360° Collection Trek Pack trade secret, Defendant used Plaintiff's trade secret as the basis of patent applications in the United States, Taiwan and China without Plaintiff's consent.
43. Defendant has commercially utilized Plaintiff's trade secret for Defendant's benefit without Plaintiff's consent.
44. Defendant has breached its duty of confidence and misappropriated Plaintiff's E-Motion 360° Collection Trek Pack trade secret.

45. Plaintiff has been, and continues to be, damaged by Defendant's theft/misappropriation of Plaintiff's E-Motion 360° Collection Trek Pack trade secret.
46. Because Defendant's actions were malicious, deliberate and made with full knowledge of, and total disregard for, Plaintiff's rights, punitive damages against Defendant are justified.

COUNT IV
(Constructive Trust)

47. Plaintiff restates, realleges and incorporates by reference paragraphs 1-46 as if fully set forth herein.
48. Defendant has knowingly, willfully, and unjustly appropriated, converted, possessed and used Plaintiff's intellectual property rights in the E-Motion 360° Collection Trek Pack invention.
49. By and through the filing of U.S. Patent Application No.09/593,301, and obtaining U.S. Patent No. 6,279,706, Taiwan Patent No. 180967 and China Patent No. ZL00209989.6, Defendant has sought to obtain and has obtained patent protection on Plaintiff's E-Motion 360° Collection Trek Pack invention.
50. Prior to the time of filing this Complaint, Plaintiff has contacted Defendant in an attempt to reach an equitable settlement of Defendant's unauthorized use of Plaintiff's E-Motion 360° Collection Trek Pack invention.
51. Defendant has rejected Plaintiff's attempts to reach an equitable settlement.
52. Plaintiff has no adequate remedy at law.
53. Based upon the foregoing, Defendant will continue to willfully, knowingly, and unjustly appropriate Plaintiff's E-Motion 360° Collection Trek Pack invention for

his own use and benefit, both in this country and abroad, unless this court imposes a constructive trust for the benefit of Plaintiff on said E-Motion 360° Collection Trek Pack invention and any patents (U.S. or foreign) issued thereon, and all proceeds derived therefrom by Defendant.

COUNT V
(Conversion)

- 54. Plaintiff restates, realleges and incorporates by reference paragraphs 1-53 as if fully set forth herein.
- 55. Defendant wrongly converted Plaintiff's intellectual property rights in Mr. Nykoluk's E-Motion 360° Collection Trek Pack invention into his own name.
- 56. Defendant has personally benefited from the above-said conversion of Plaintiff's rights in the E-Motion 360° Collection Trek Pack invention.
- 57. Plaintiff has been damaged by Defendant's wrongful conversion.
- 58. Because Defendant's actions were malicious, deliberate, and made with full knowledge of, and in total disregard for, the rights of Plaintiff, punitive damages against Defendant are justified.

COUNT VI
(Unjust Enrichment)

- 59. Plaintiff restates, realleges and incorporates by reference paragraphs 1-58 as if fully set forth herein.
- 60. Defendant has been unjustly enriched at the expense of Plaintiff by the unlawful use of Plaintiff's intellectual property rights in the E-Motion 360° Collection Trek Pack invention, including the above-described wrongful appropriation of

Plaintiff's rights in U.S. Patent No.6,279,706, Taiwan Patent No. 180967 and China Patent No. ZL00209989.6.

61. Because Defendant's actions were malicious, deliberate, and made with full knowledge of, and in total disregard for, the rights of Plaintiff, punitive damages against Defendant are justified.

COUNT VII
(Common Law Unfair Competition)

62. Plaintiff restates, realleges and incorporates by reference paragraphs 1-61 as if fully set forth herein.
63. Defendant's actions as specified above, including but not limited to his breach of confidence and misappropriation of trade secret, conversion of Plaintiff's intellectual property rights and unjust enrichment at the expense of Plaintiff, constitute unfair competition with Plaintiff by reason of Defendant's use of the Plaintiff's E-Motion 360° Collection Trek Pack invention.
64. Defendant's acts of unfair competition have caused and are continuing to cause irreparable harm to Plaintiff and unless Defendant's use of Plaintiff's invention is restrained, Defendant will continue its tortious acts to Plaintiff's detriment.

PRAYER FOR RELIEF

WHEREFORE, TRG Accessories, LLC, respectfully demands judgment in its favor and against Defendant Mao and prays for:

- a. correction of the '706 patent to reflect that Defendant Mao is not the inventor of the E-Motion 360° Collection Trek Pack;
- b. correction of the '706 patent to reflect that Cory Nykoluk is the inventor of the E-Motion 360° Collection Trek Pack;

- c. such damages as Plaintiff has sustained as a result of Defendant's breach of confidence and misappropriation of Plaintiff's trade secret;
- d. a constructive trust for the benefit of Plaintiff on U.S. Patent No. 6,279,706, Taiwan Patent No. 180967 and China Patent No. ZL00209989.6;
- e. such damages as Plaintiff has sustained as a result of Defendant's conversion of Plaintiff's intellectual property rights in the E-Motion 360° Collection Trek Pack invention;
- f. such damages as Plaintiff has sustained as a result of Defendant's unjust enrichment at the expense of Plaintiff;
- g. such damages as Plaintiff has sustained as a result of Defendant's unfair competition;
- h. for an injunction prohibiting Defendant from manufacturing the E-Motion 360° Collection Trek Pack invention for his own use;
- i. for an injunction prohibiting the Defendant from importing into the United States any E-Motion 360° Collection Trek Packs not for the benefit of Plaintiff;
- j. for punitive damages in an amount to be determined by the jury;
- k. for prejudgment and postjudgment interest;
- l. for assessment of costs against Defendant;
- m. for reasonable attorneys' fees; and
- n. for such other relief as this Court may deem just and proper.

Respectfully submitted,

LEWIS, RICE & FINGERSH, L.C.

By: 

Frank B. Janoski #3480

John W. Vandervoort #114125

500 N. Broadway, Suite 2000

St. Louis, MO 63102-2147

Telephone: (314) 444-7600

Fax: (314) 241-6056

Attorneys for Plaintiff

TRG Accessories, Inc.



US006279706B1

(12) United States Patent
Mao

(10) Patent No.: US 6,279,706 B1
(45) Date of Patent: Aug. 28, 2001

(54) PULL ROD OF LUGGAGE CAPABLE
CARRIED ON ONE'S BACK

(76) Inventor: Chen Shou Mao, 344 Section 1, Chung
Shan Road, Ta Cha Township, Taichung
Hsien (TW)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/593,301

(22) Filed: Jun. 13, 2000

(51) Int. Cl.⁷ A45C 13/26

(52) U.S. Cl. 190/115; 190/18 A; 16/113.1;
224/153

(58) Field of Search 224/153; 16/429,
16/113.1; 190/119, 115

(56) References Cited

U.S. PATENT DOCUMENTS

5,464,080 * 11/1995 Liang 190/115 X

5,464,081 * 11/1995 Zwanzig 190/115
5,469,945 * 11/1995 Jserng 190/115
5,497,865 * 3/1996 Yun-Pi 190/115
5,865,281 * 2/1999 Wang 190/115 X
5,893,495 * 4/1999 Godshaw et al. 190/115
5,908,095 * 6/1999 Miyoshi 190/115
6,041,900 * 3/2000 Sadow et al. 190/115 X

* cited by examiner

Primary Examiner—Allan N. Shoap

Assistant Examiner—Tri M. Mai

(74) Attorney, Agent, or Firm—Harrison & Egbert

(57) ABSTRACT

Luggage having two shoulder straps to facilitate the carrying of the luggage on the back of a person. The luggage is further provided to a pull rod which is fastened at the bottom end with a base located at the bottom of the interior of the luggage. The pull rod is so curved that it is corresponding in curvature to the human spinal cord, thereby preventing the pull rod from causing discomfort to the person's back on which the luggage is carried.

2 Claims, 9 Drawing Sheets

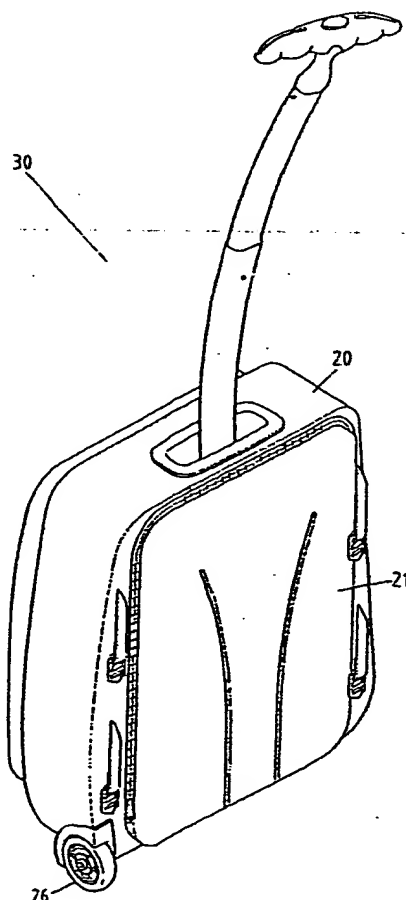
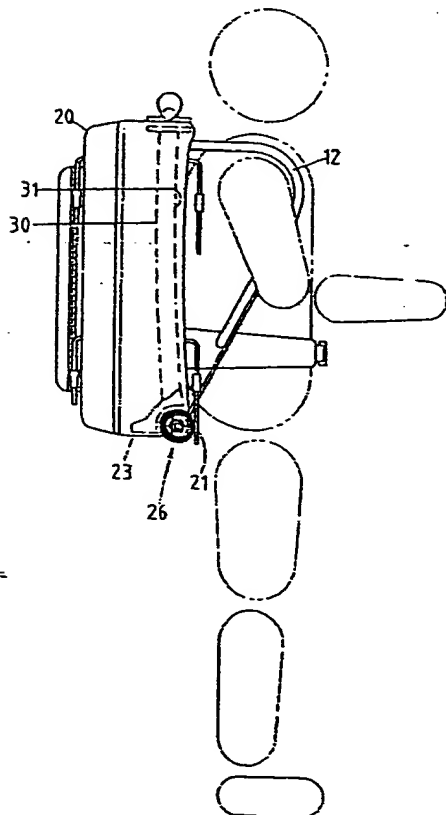


EXHIBIT
A

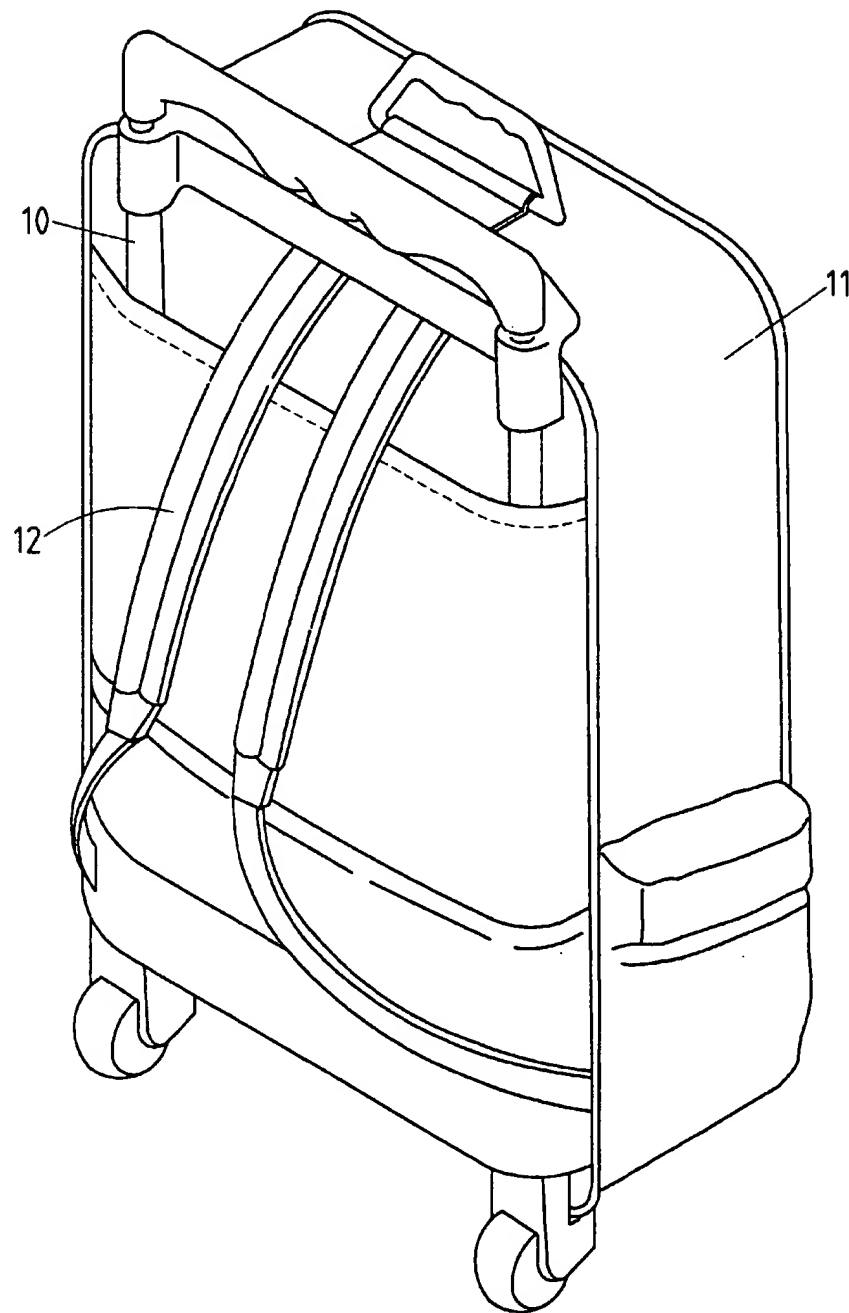


FIG.1 PRIOR ART

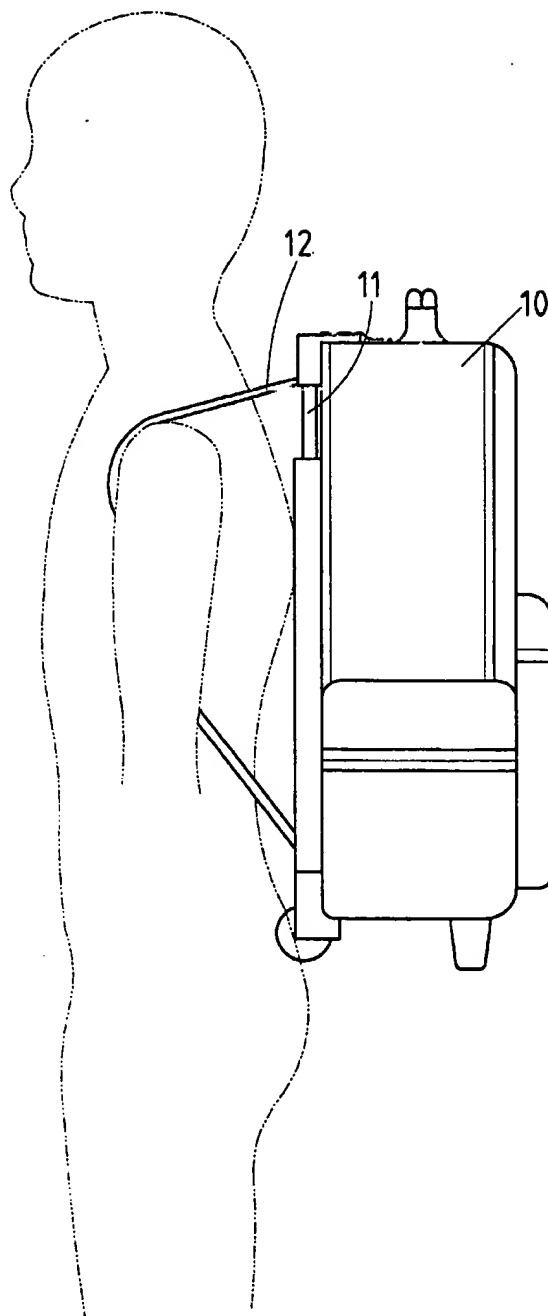


FIG. 2 PRIOR ART

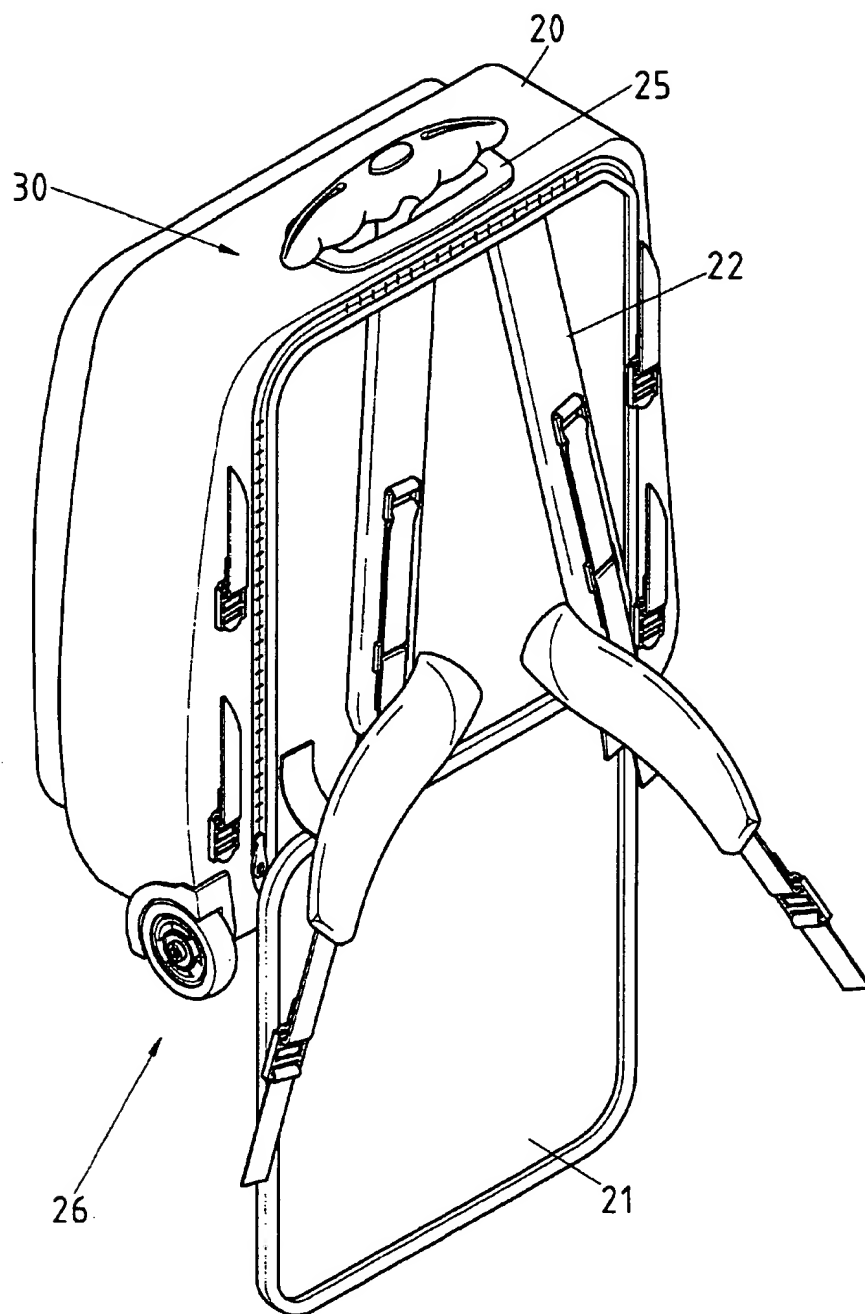


FIG. 3

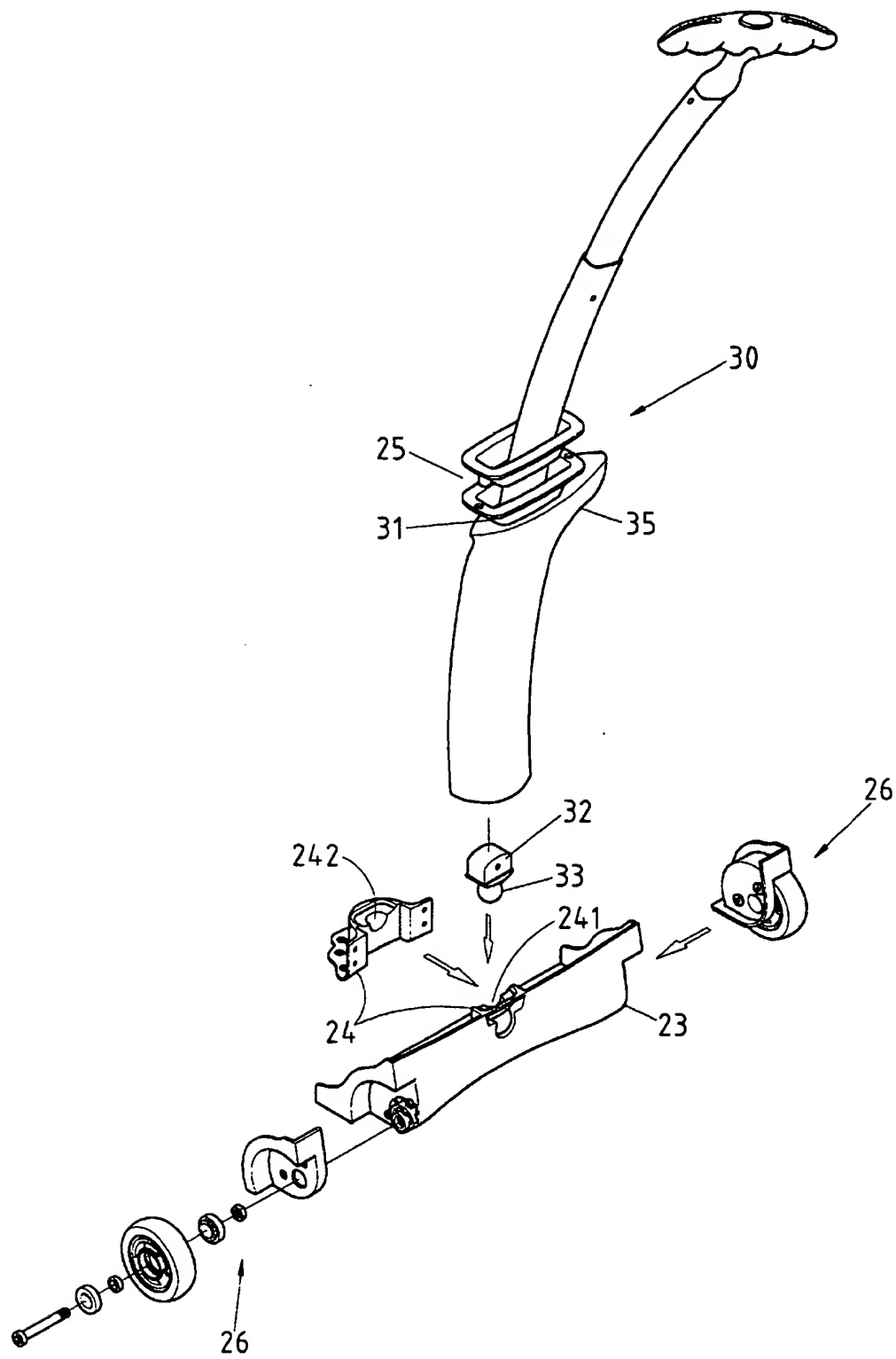


FIG.4

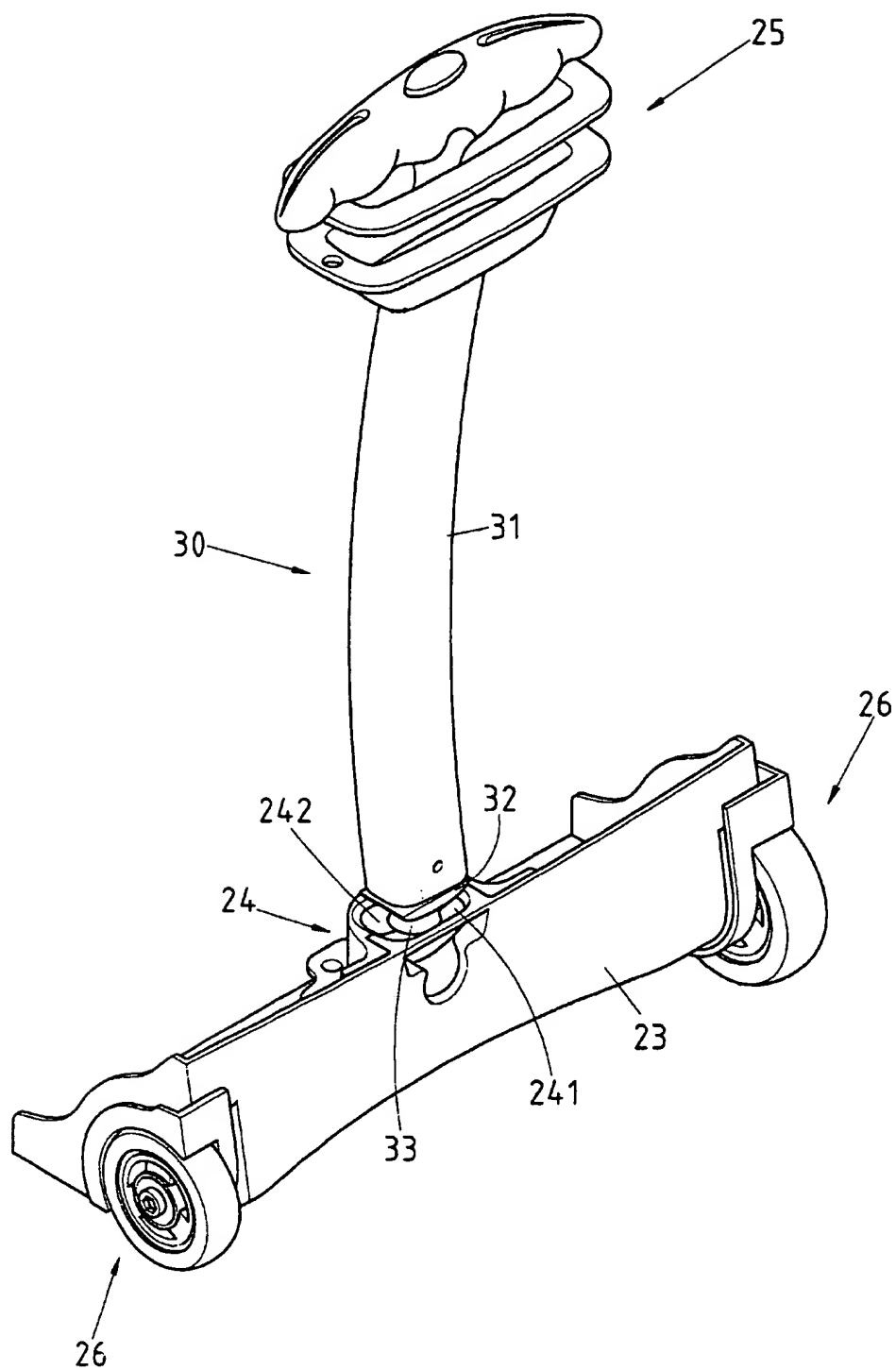


FIG. 5

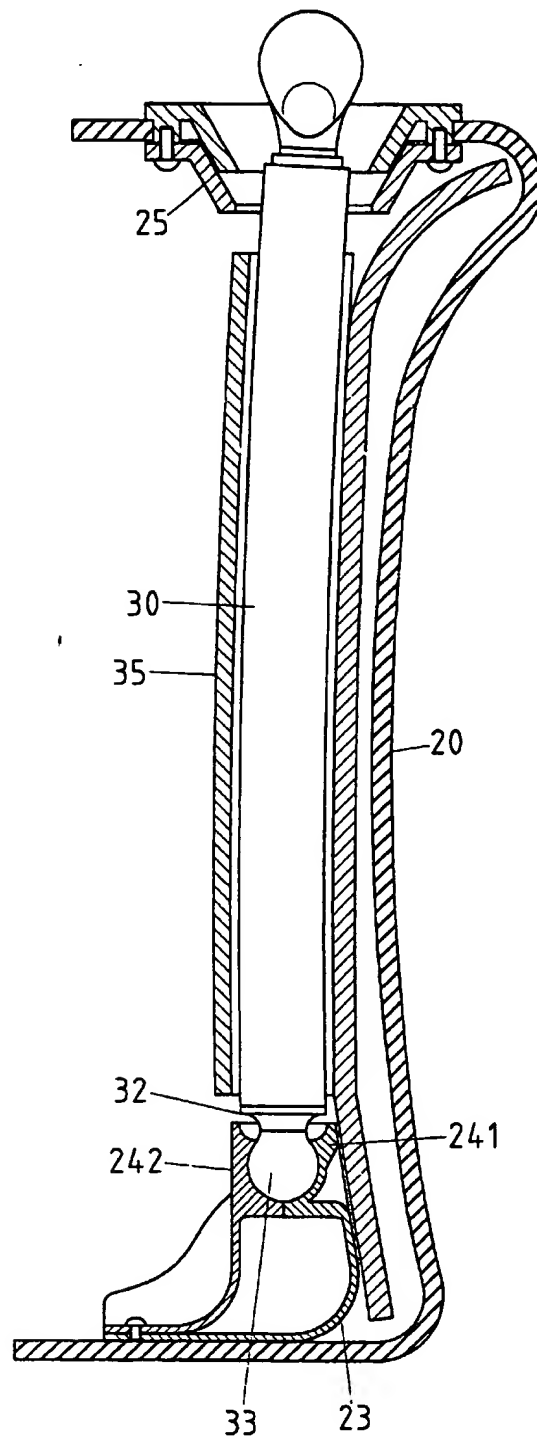


FIG. 6

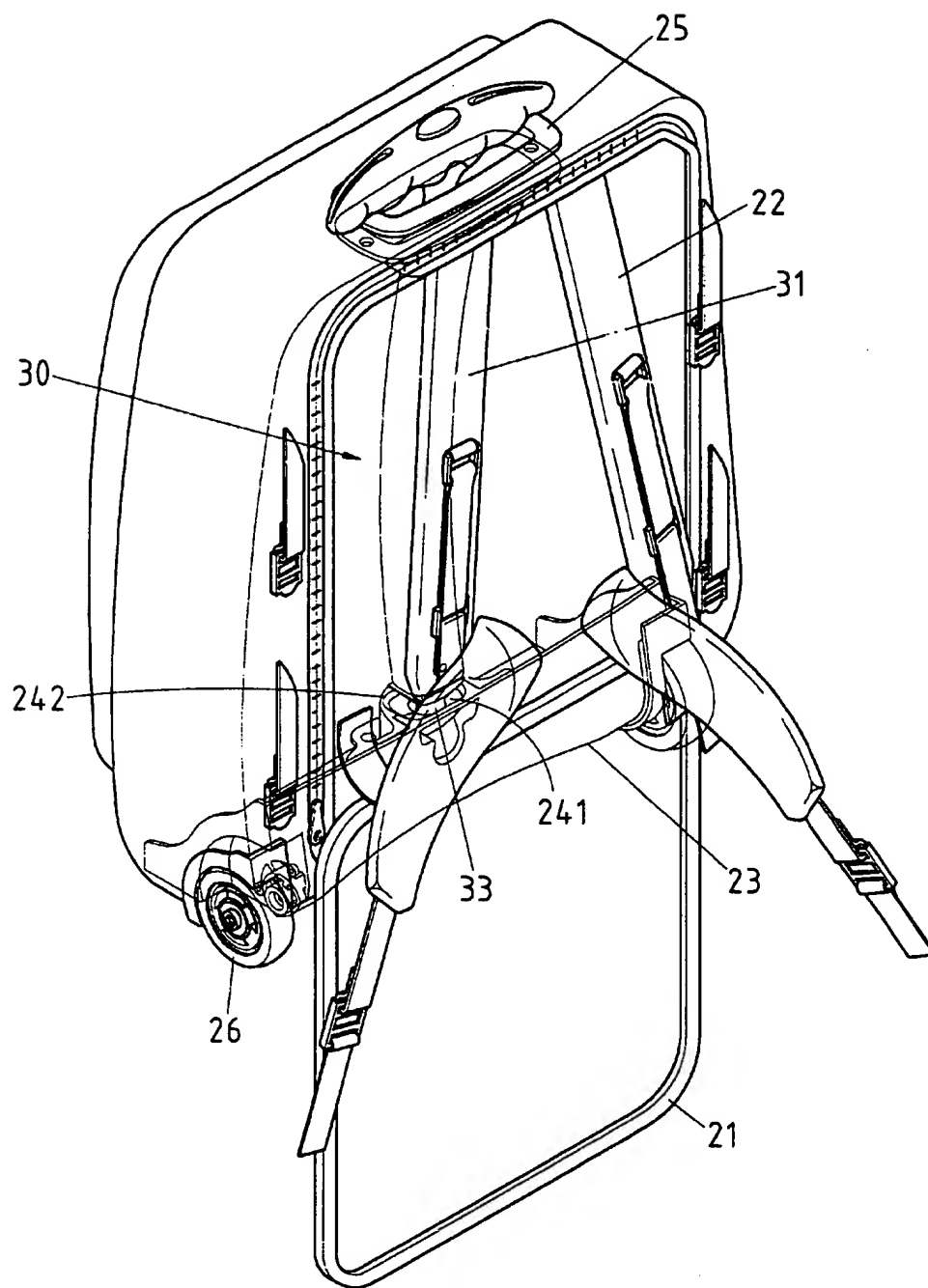


FIG. 7

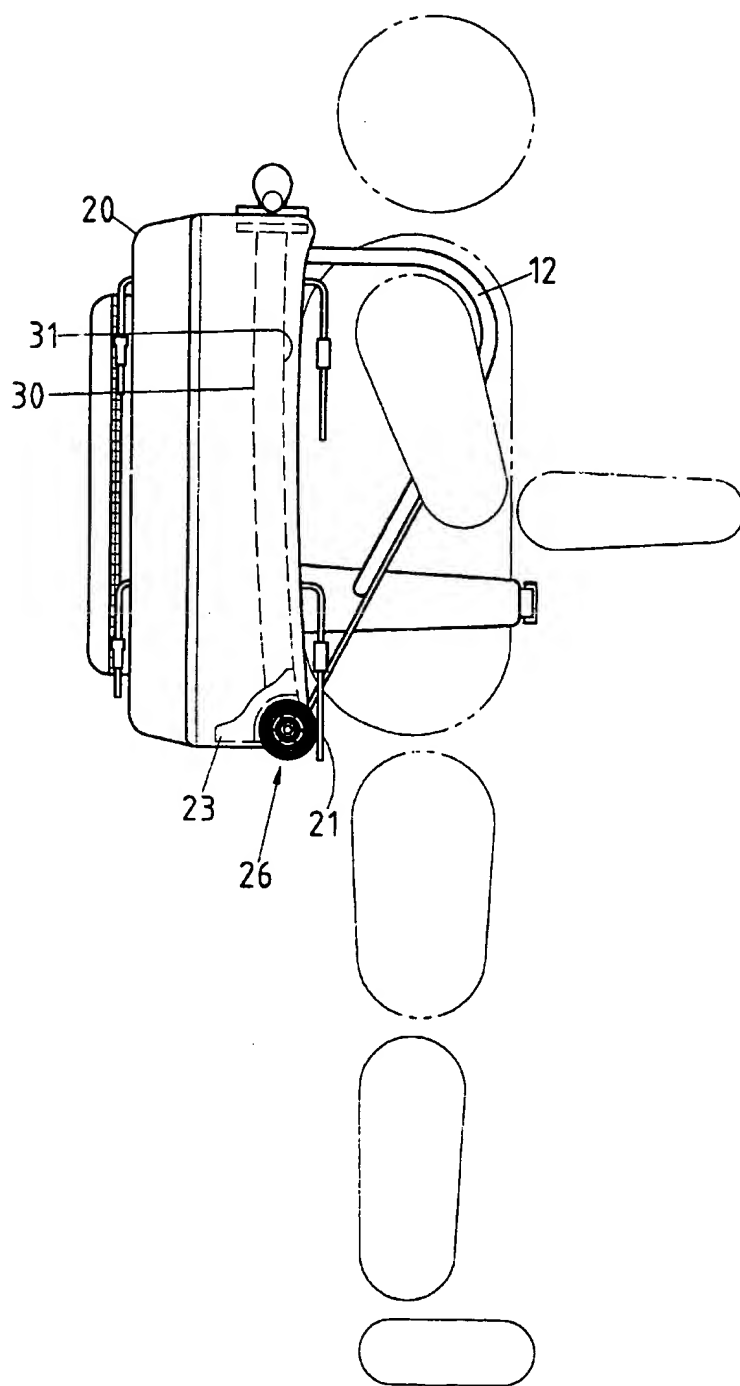


FIG. 8

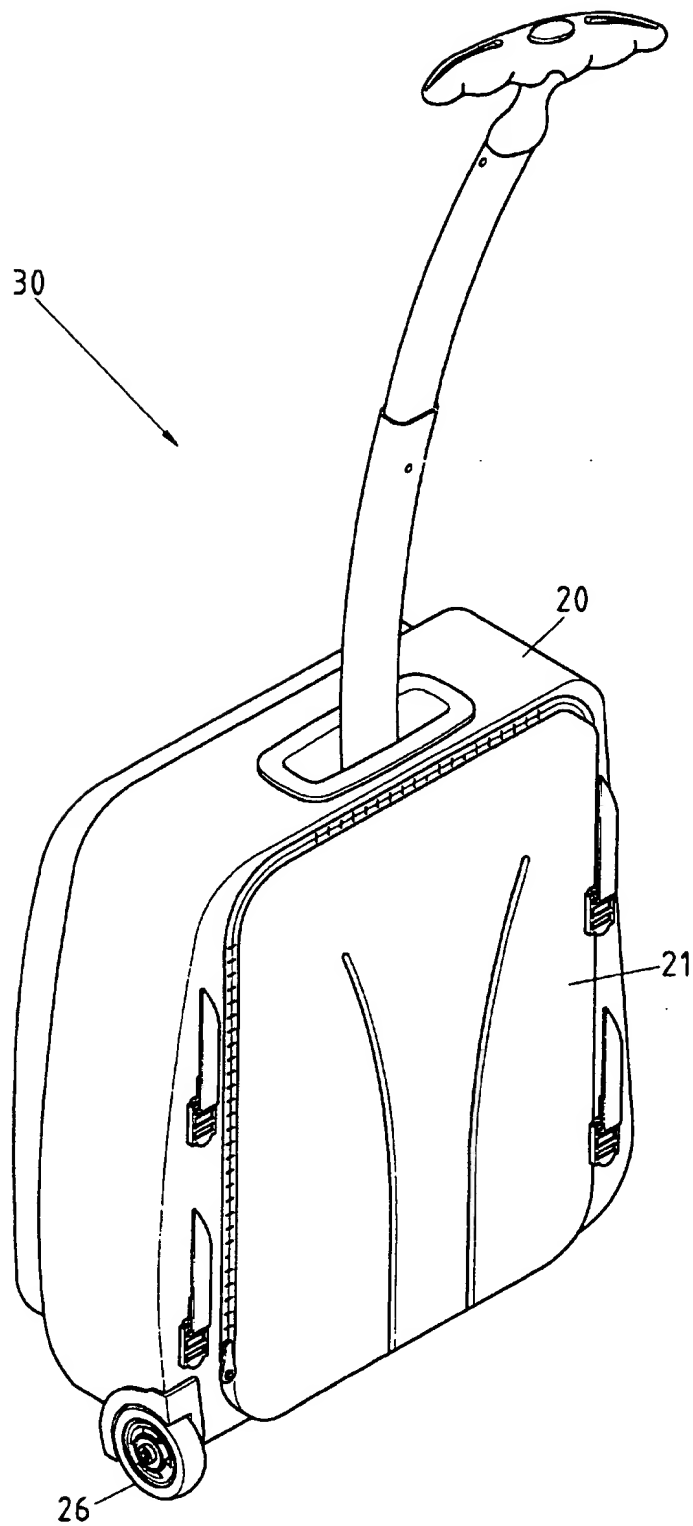


FIG. 9

1

PULL ROD OF LUGGAGE CAPABLE CARRIED ON ONE'S BACK

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to luggage, and more particularly to a pull rod for luggage.

2. Description of Related Arts

As shown in FIGS. 1 and 2, a prior art luggage 11 is provided with an expandable pull rod 10 and two shoulder straps 12 enabling the luggage 11 to be carried on the back of a person. The pull rod 10 is made of a metal material and is fastened to the back side of the luggage 11. When the luggage 11 is carried on the back of a person, the rigid pull rod 10 often becomes a source of discomfort to the back of the person, especially when the person bends.

BRIEF SUMMARY OF THE INVENTION

The primary objective of the present invention is therefore to provide a luggage pull rod which is free from the deficiency of the luggage pull rod of the prior art described above.

The features and the advantages of the present invention readily appreciated and understood upon a thoughtful deliberation of the following detailed description of a preferred embodiment of the present invention with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

FIG. 1 shows a perspective view of a prior art luggage capable of being carried on the back of a person.

FIG. 2 shows a schematic view of the prior art luggage being carried on the back of a person.

FIG. 3 shows a perspective view of luggage of the preferred embodiment of the present invention.

FIG. 4 shows a partial exploded view of the preferred embodiment of the present invention.

FIG. 5 shows a perspective view of a pull rod frame of the preferred embodiment of the present invention.

FIG. 6 shows a sectional schematic view of the pull rod frame of the preferred embodiment of the present invention.

FIG. 7 shows another perspective view of the luggage of the preferred embodiment of the present invention.

FIG. 8 shows a schematic view of the luggage of the present invention being carried on the back of a person.

FIG. 9 shows a schematic perspective view of the luggage of the present invention with its pull rod being fully extracted.

DETAILED DESCRIPTION OF THE INVENTION

As shown in FIGS. 3-9, a luggage 20 of the preferred embodiment of the present invention is provided in the back side thereof with a bag 21, and two shoulder straps 22 enabling the luggage 20 to be carried on the back of a person, as shown in FIG. 8. The luggage 20 is further provided at the bottom of the interior thereof with a base 23 which is provided in the center with a pivoting seat 24 for

2

mounting pivotally a pull rod frame 30. The luggage 20 is provided at the top with a locating piece 25 for locating an arcuate pull rod 31 of the pull rod frame 30. The base 23 is provided at the two longitudinal ends with a caster 26 pivoted thereto.

As shown in FIG. 4, the pivoting seat 24 is provided with a first receiving slot 241 and a second receiving slot 242. The first receiving slot 241 is made integrally with the pivoting seat 24 and is of a semispherical construction. The second receiving slot 242 is symmetrical in construction to the first receiving slot 241 such that the second receiving slot 242 forms with the first receiving slot 241 a spherical slot for receiving a spherical body 33 of a connection body 32 which is fastened to the bottom end of the pull rod 31. It must be noted that the second receiving slot 242 is independent of the first receiving slot 241 and is fastened to the pivoting seat 24 by a plurality of screws.

As shown in FIG. 6, the pull rod frame 30 is enclosed in a fabric jacket 35 which is fastened to the inside wall of the luggage 20.

In light of the curved pull rod 31 being corresponding in curvature to the human spinal cord, the curved pull rod 31 does not bother a person's back on which the luggage 20 of the present invention is carried. In addition, the fabric jacket 35 serves to provide a cushioning effect to mitigate the discomfort that the pull rod 31 might cause to the person's back.

The embodiment of the present invention described above is to be regarded in all respects as being merely illustrative and not restrictive. Accordingly, the present invention may be embodied in other specific forms without deviating from the spirit thereof. The present invention is therefore to be limited only by the scope of the following appended claims.

What is claimed is:

1. An article comprising:

a luggage;

a pair of shoulder straps affixed to said luggage so as to be extendable outwardly therefrom so as to allow said luggage to be carried on a human back;

a base affixed to a bottom of an interior of said luggage, said base having a pivoting seat with a spherical slot, said spherical slot being defined by a first receiving slot and a second receiving slot affixed together; and

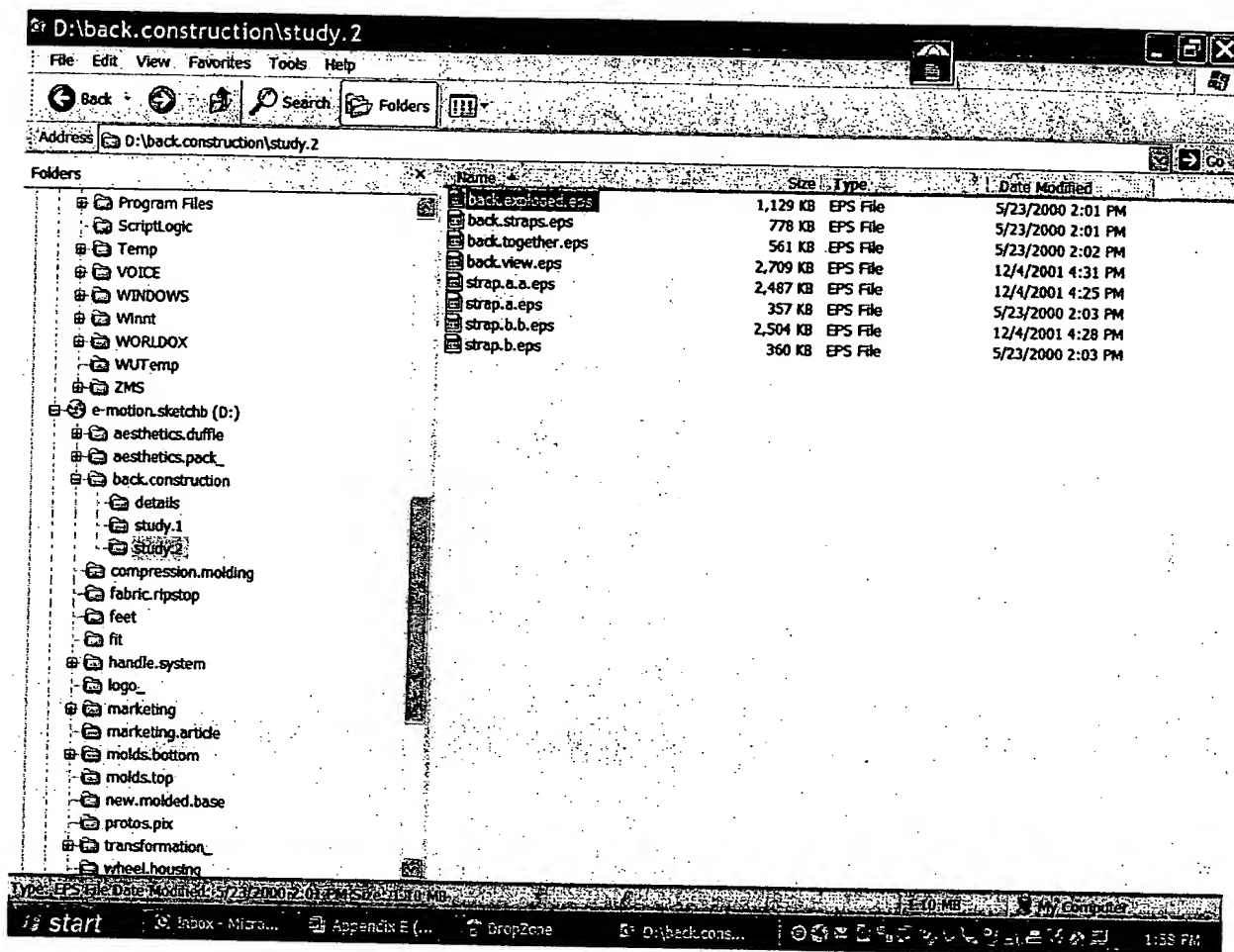
a pull rod frame having a pull rod telescopically received therein, said pull rod frame and said pull rod being curved along a longitudinal axis thereof so as to conform to a shape of the human back, said pull rod frame having a connection body fastened to a bottom end thereof, said connection body having a spherical body formed thereon, said pull rod frame mounted to said base such that said spherical body is received in said spherical slot of said pivoting seat, said pull rod frame positioned interior of said luggage, said pull rod having a handle affixed thereto, said handle positioned on an exterior of said luggage such that said pull rod is longitudinally slidable outwardly of said pull rod frame.

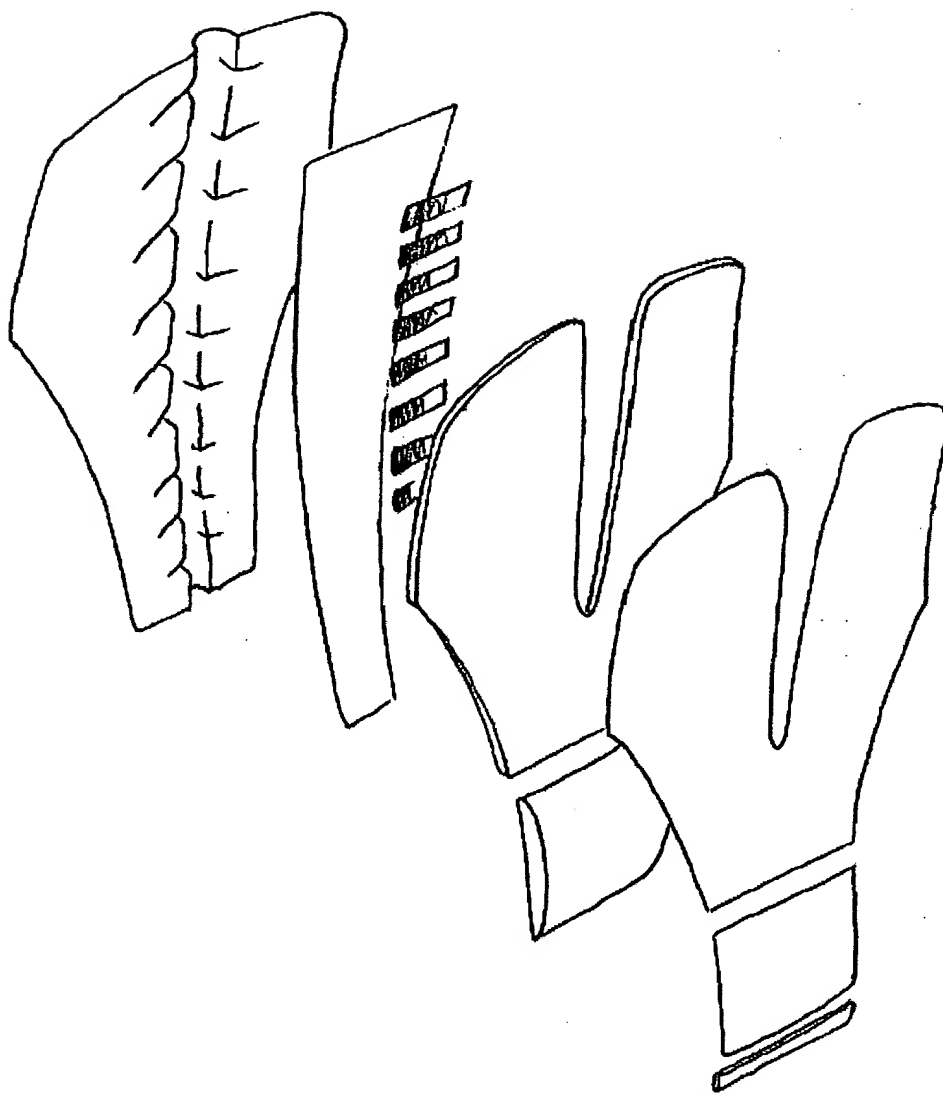
2. The article of claim 1, further comprising:

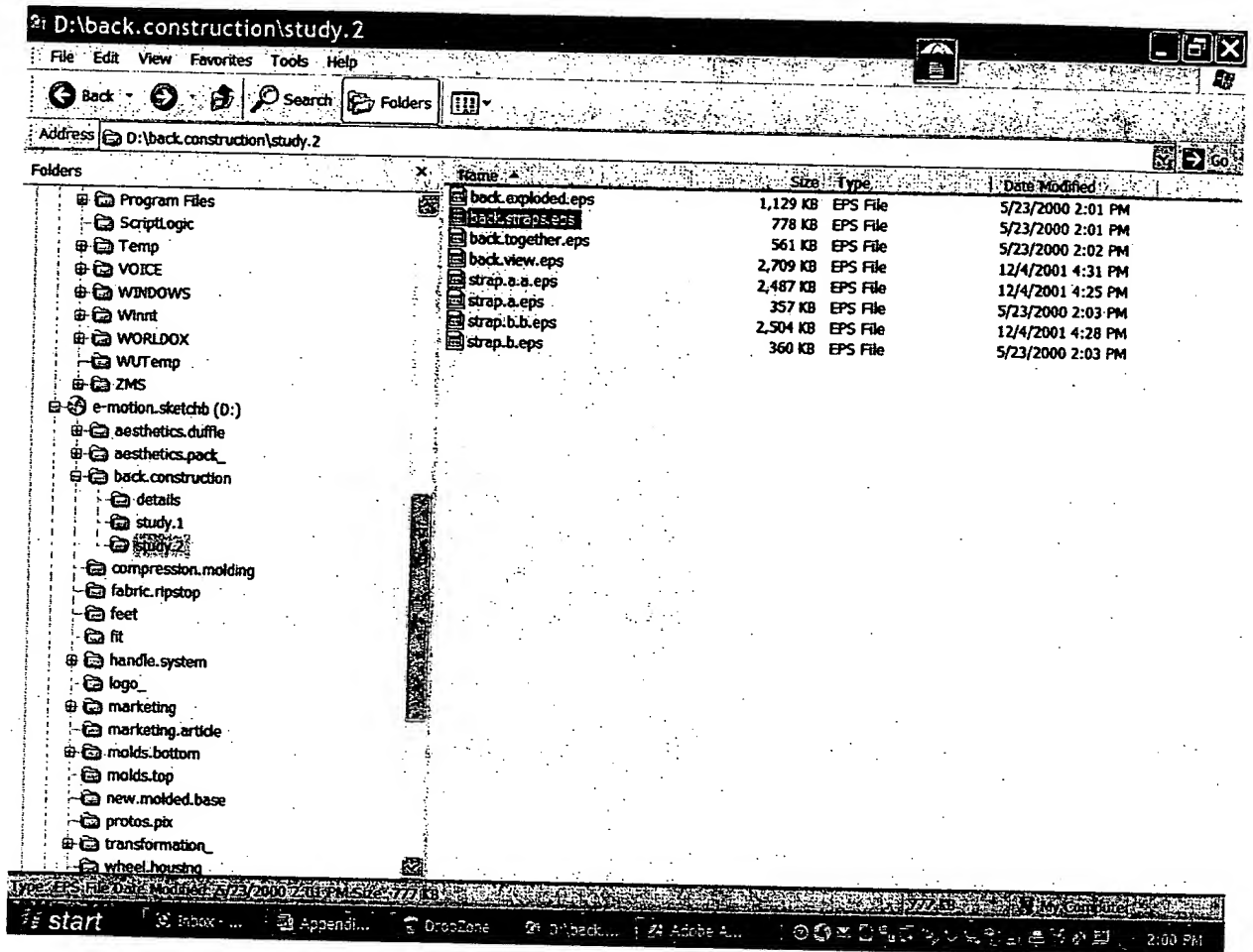
a locating piece affixed to a top of said luggage, said pull rod extending through said locating piece.

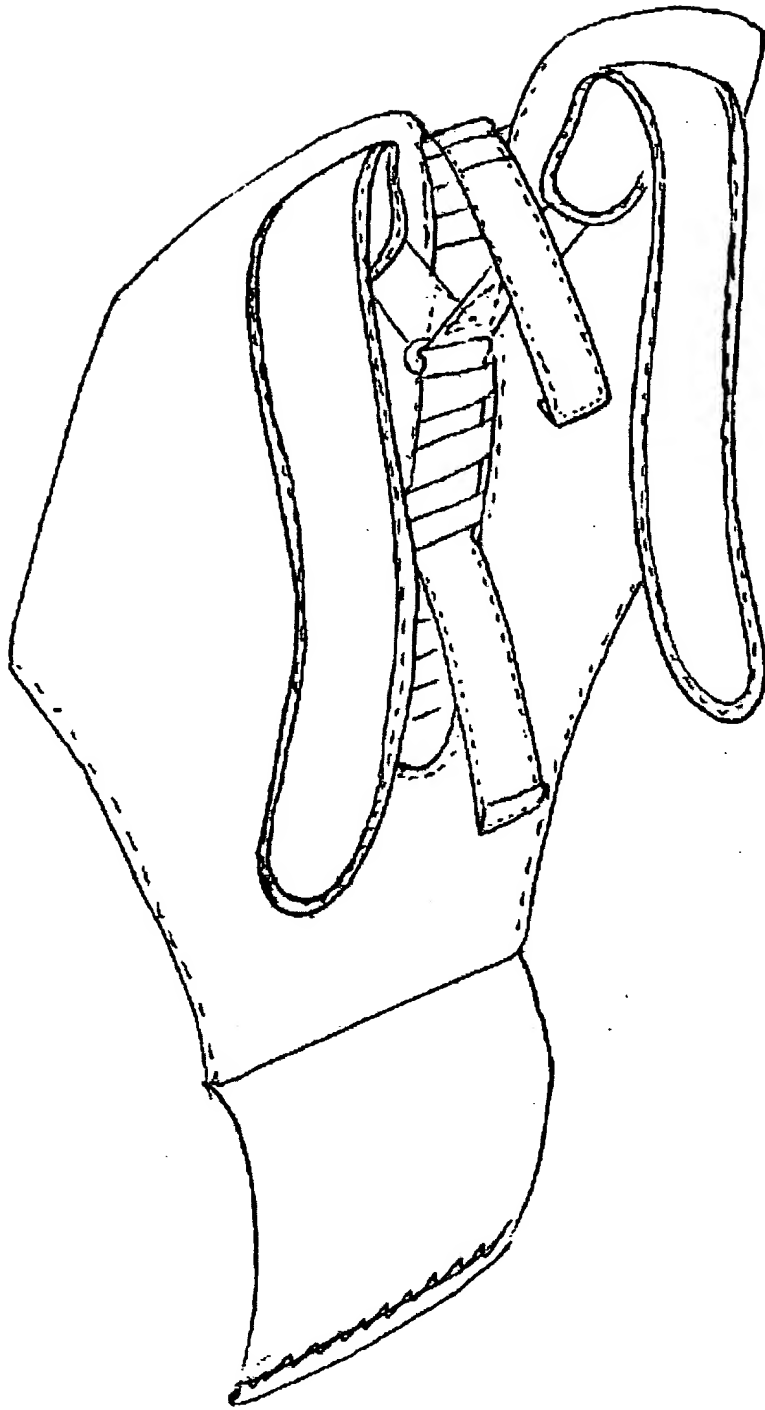
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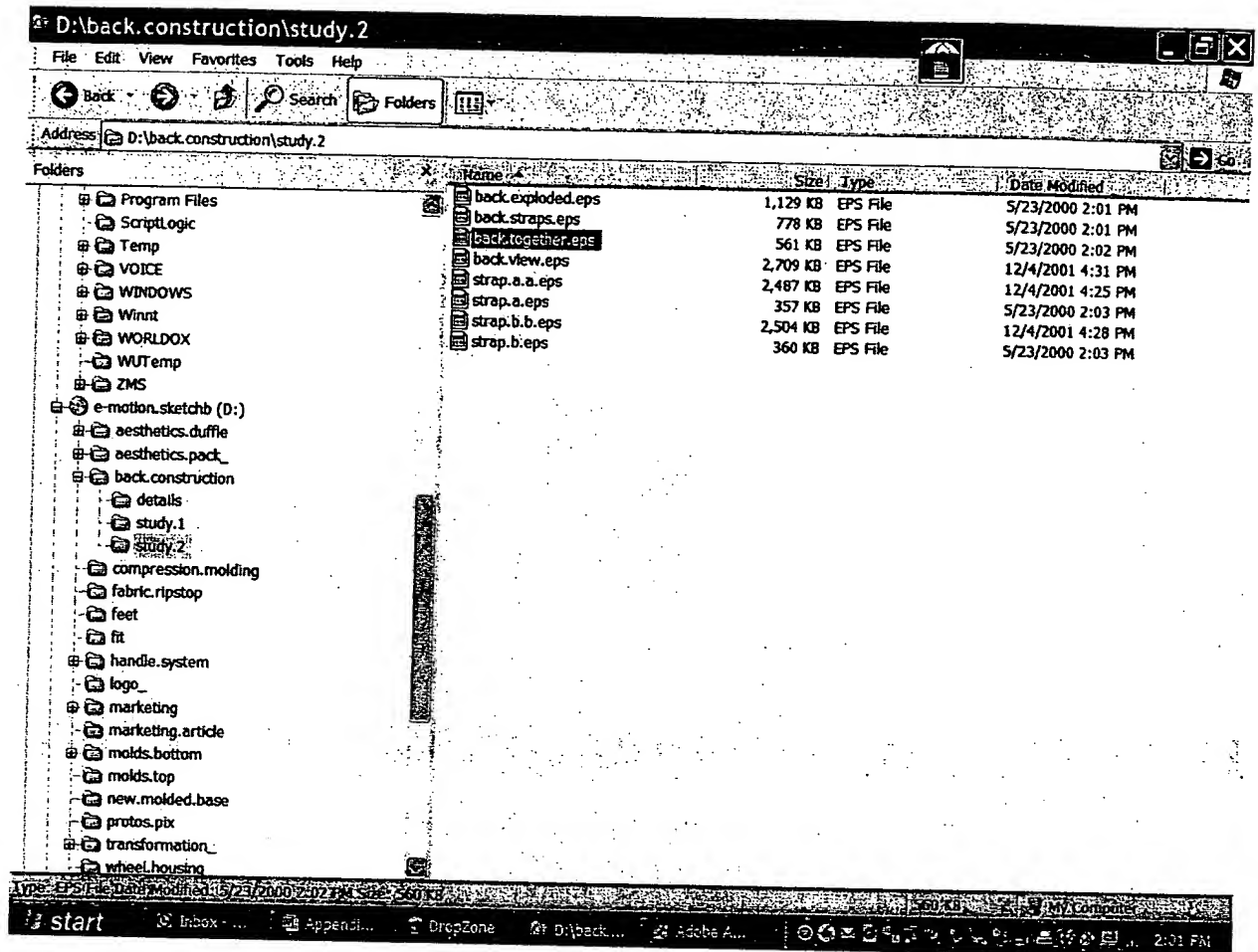
APPENDIX E

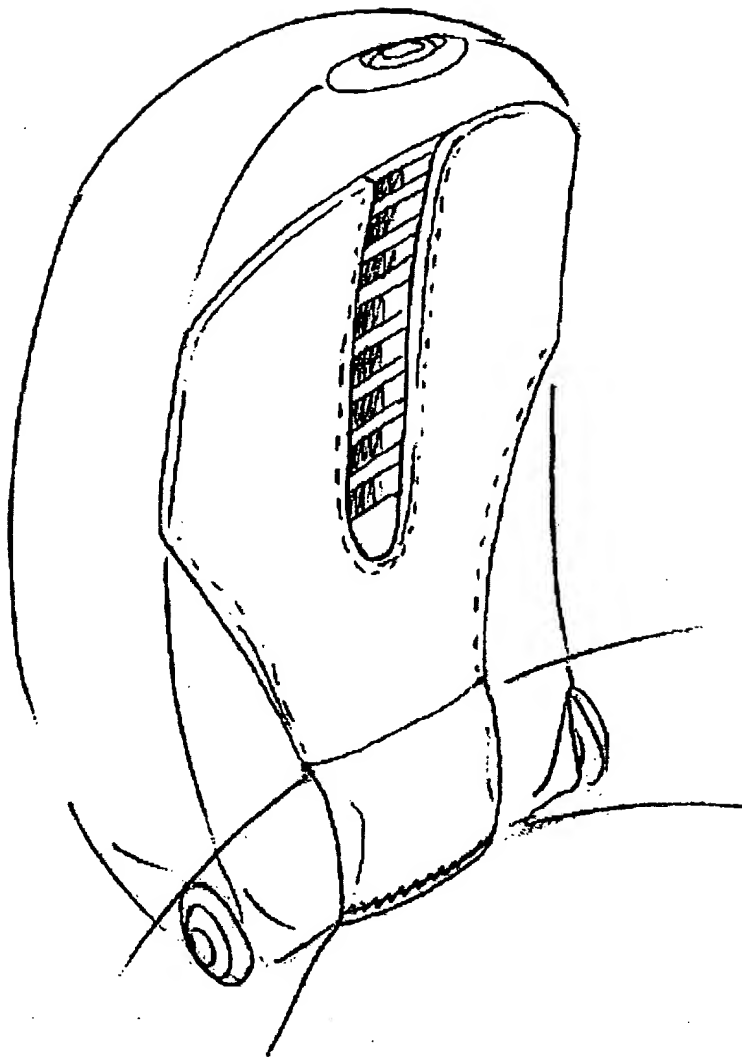


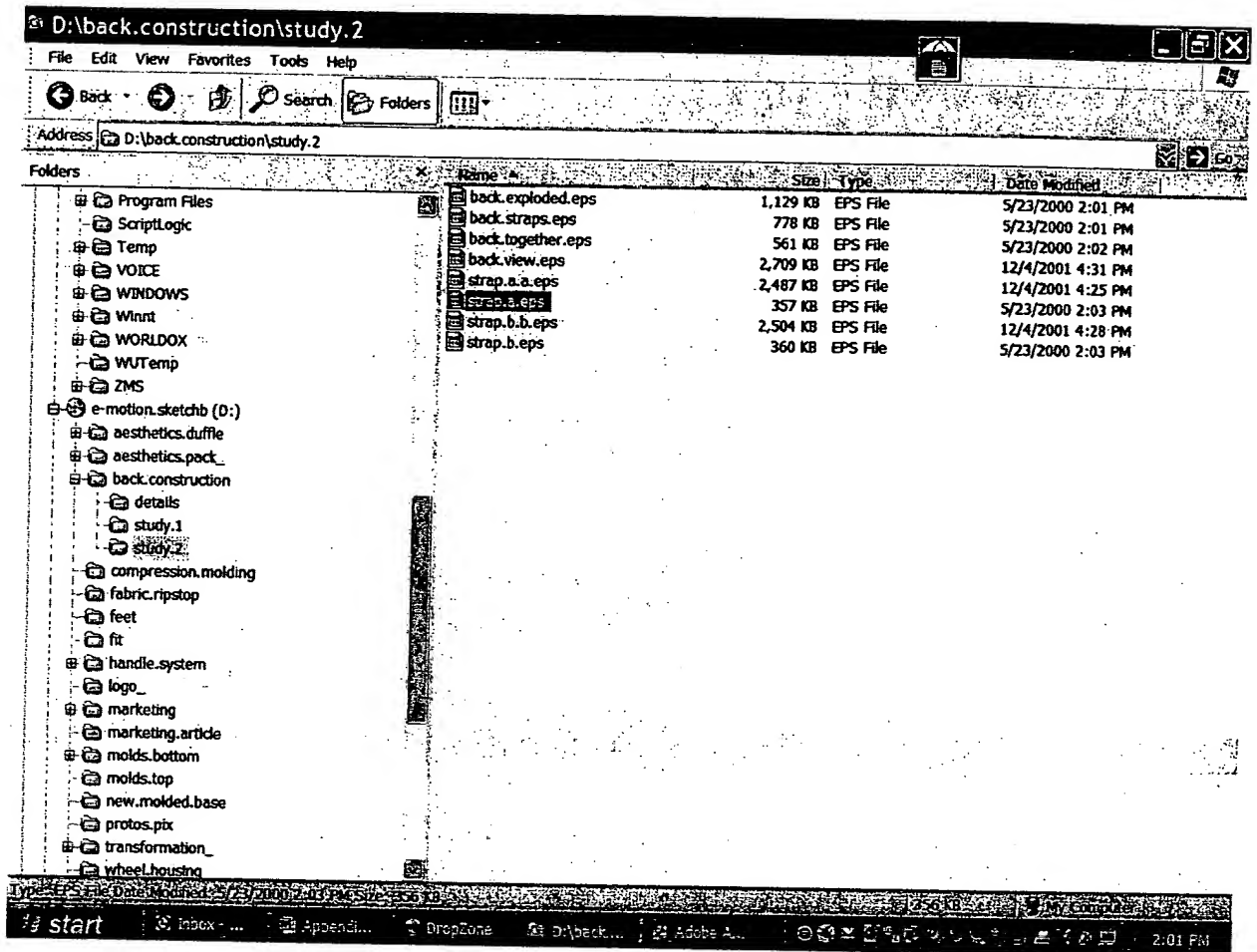


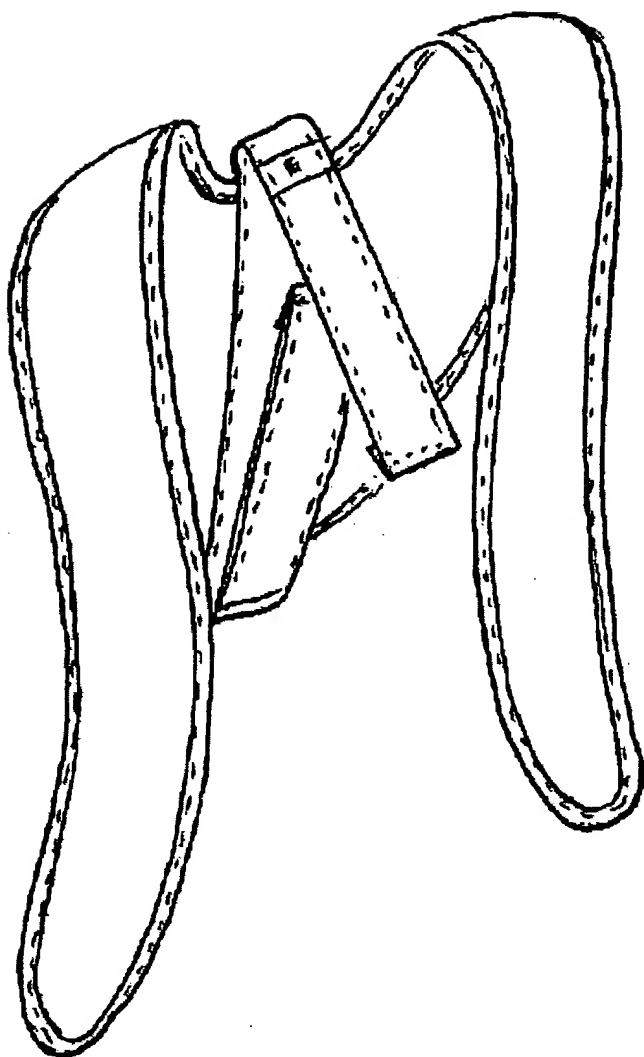


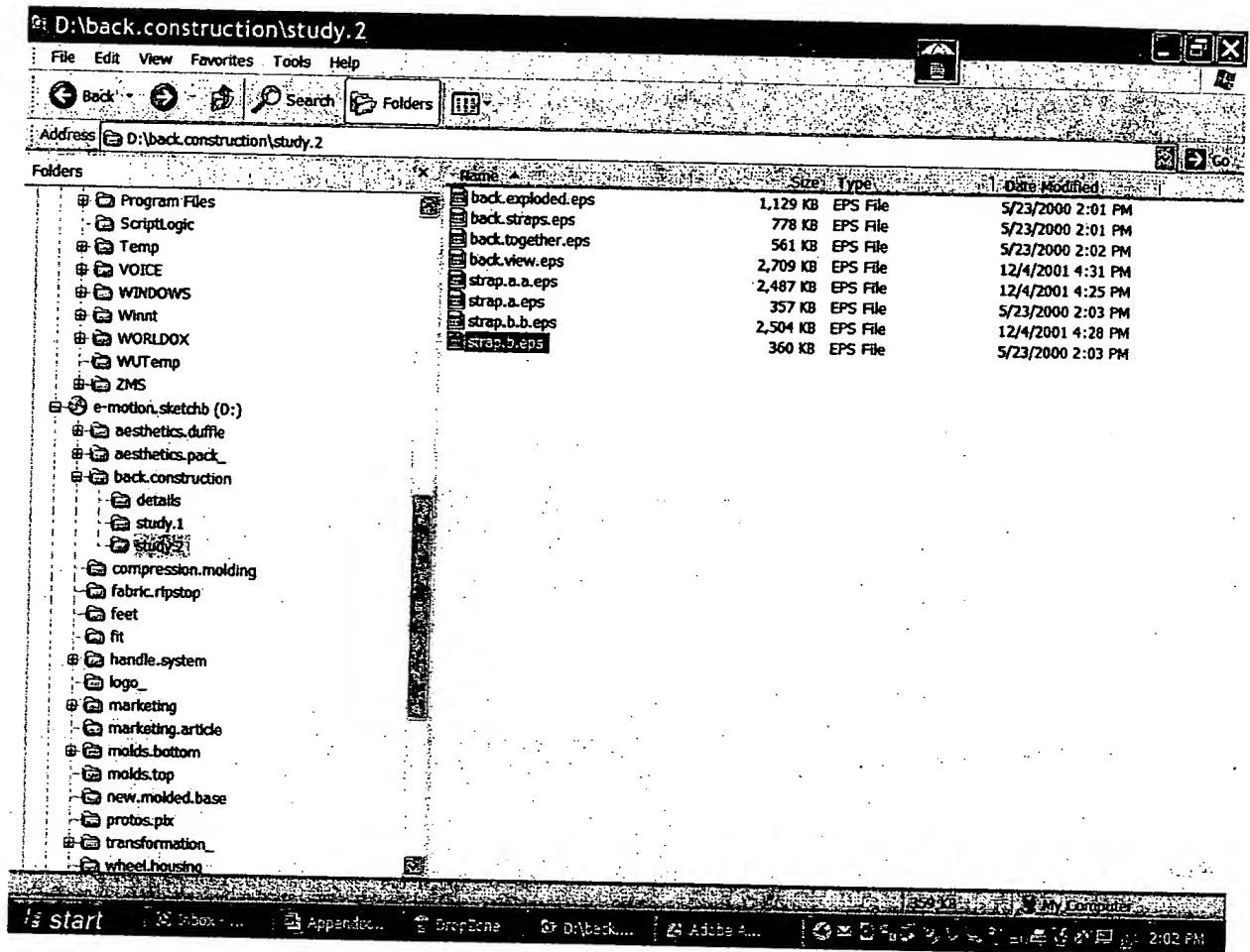


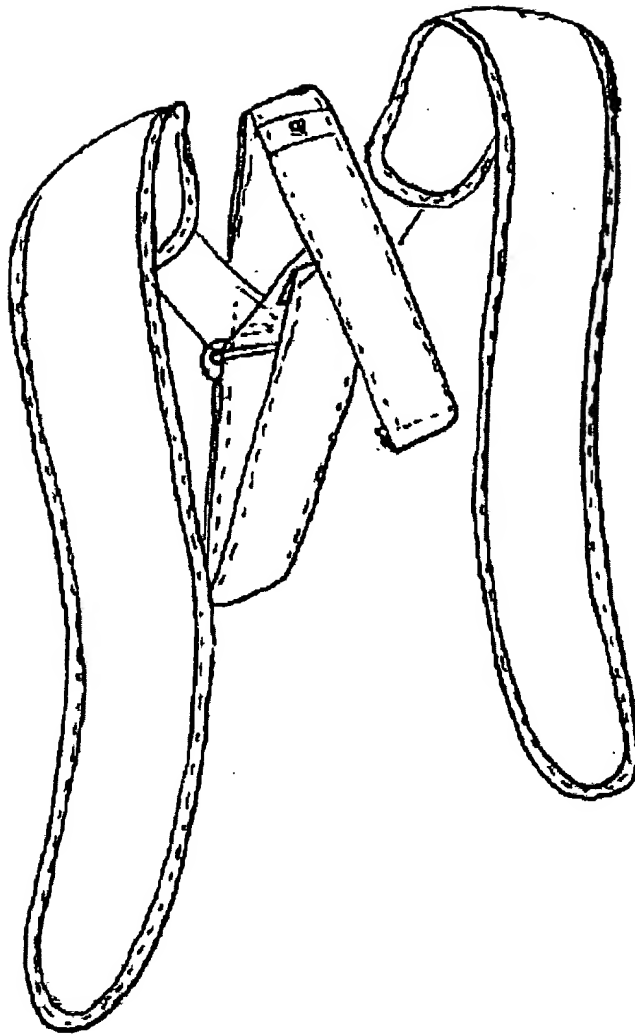




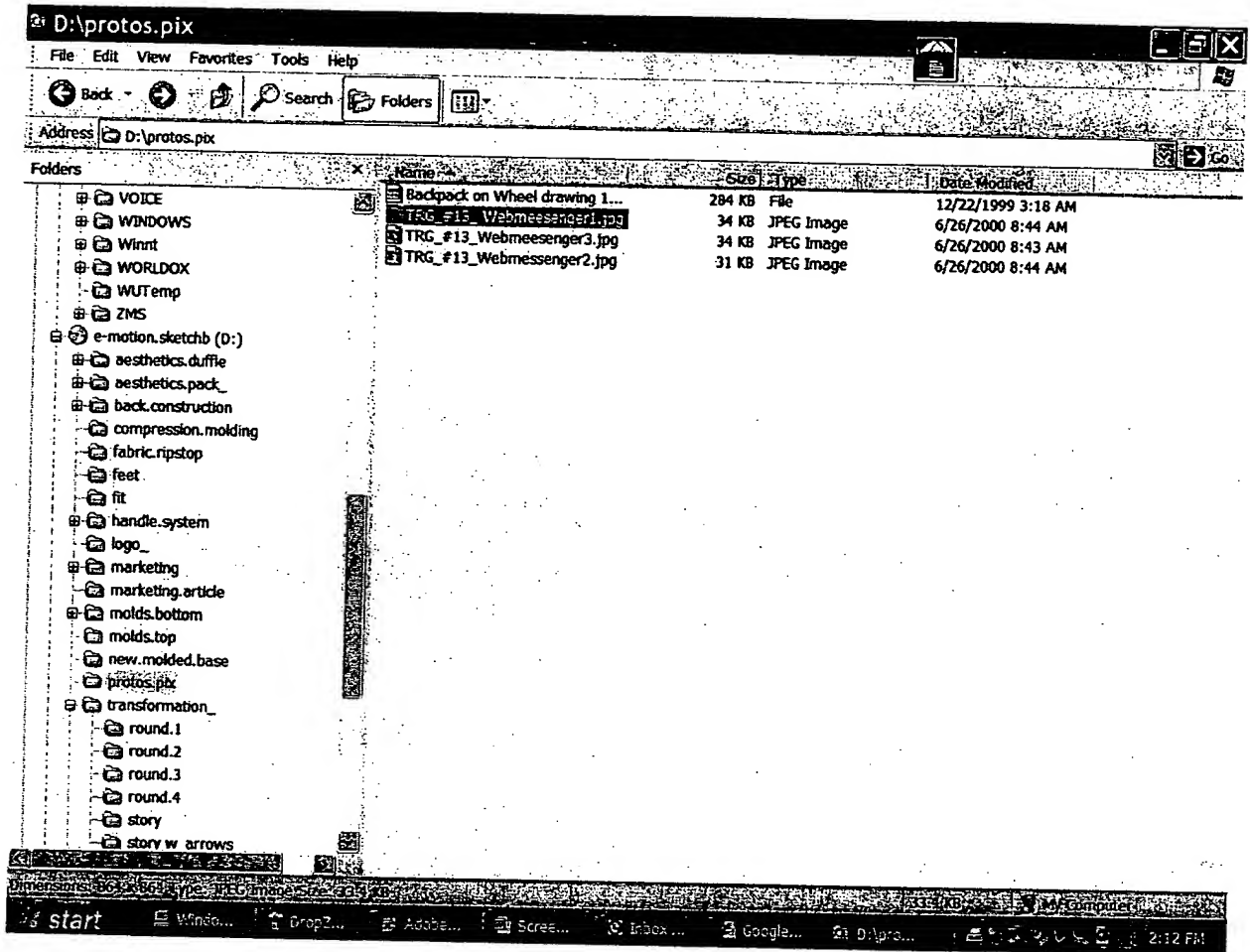




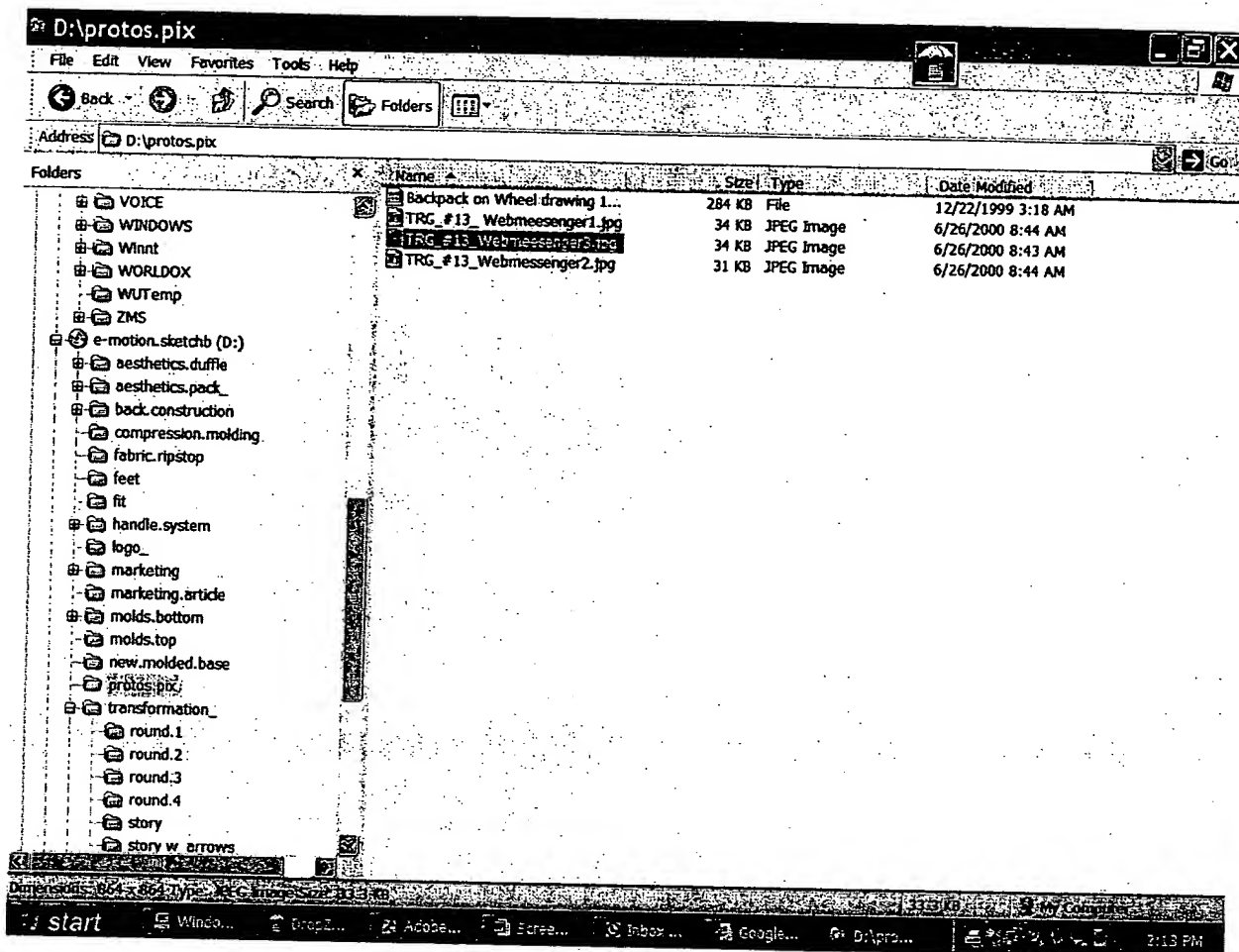


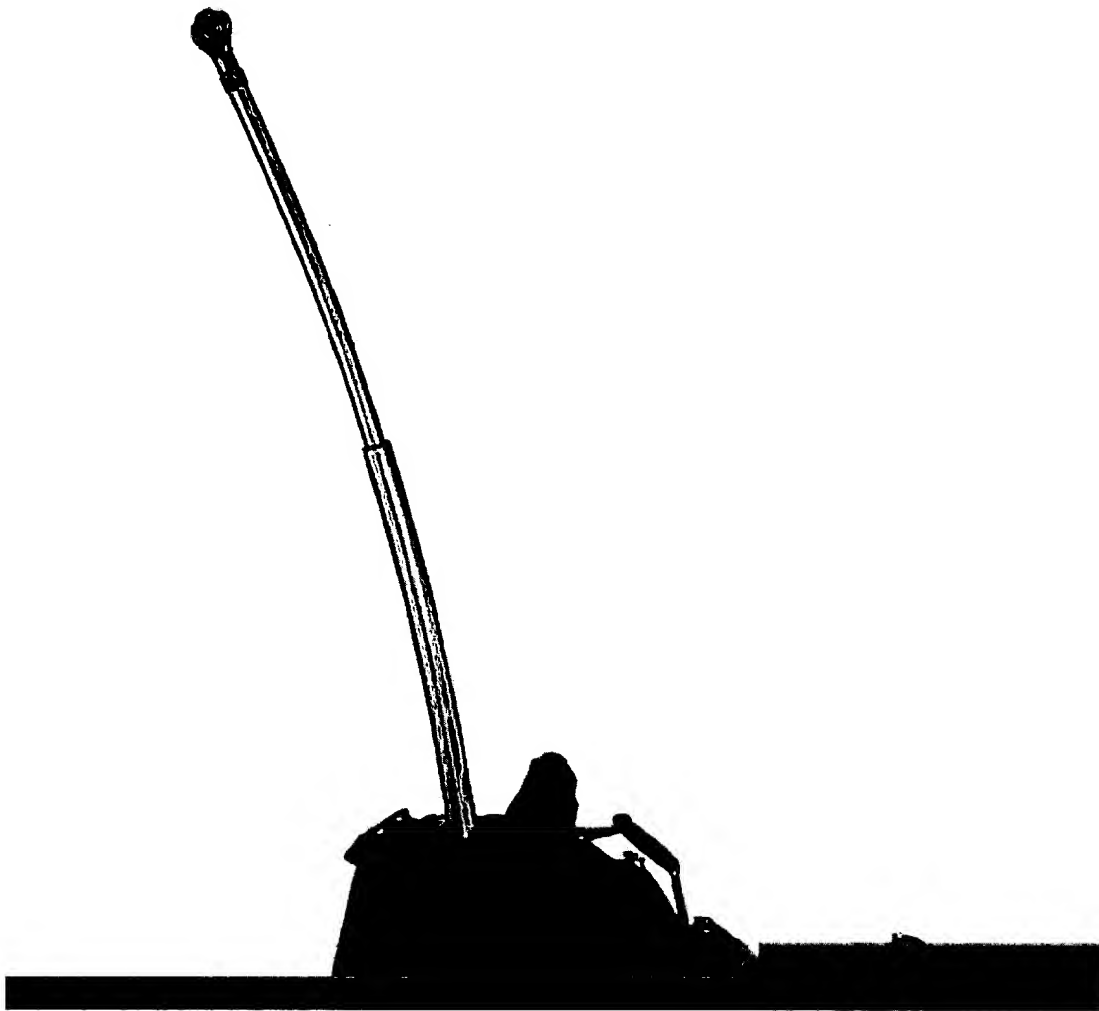


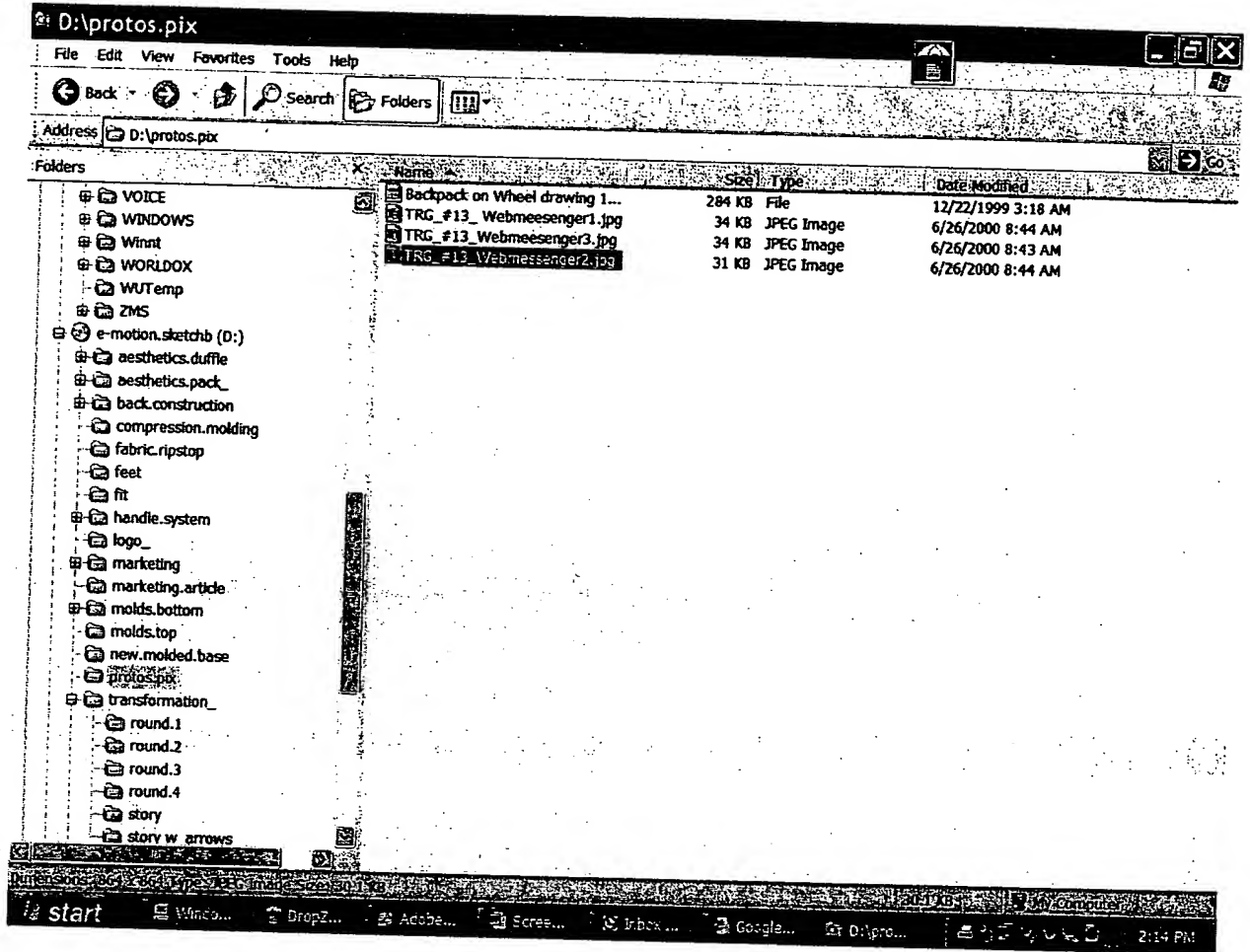
APPENDIX F













APPENDIX G

Project Timeline - Swiss Army Field Gear - Wheeled Back Pack

File -
BPow

Week of...	Design Work In Process...
03, Apr 2000	finish 2nd eva top mold, finalize collection silhouettes
10, Apr 2000	start 2nd prototypes, answer questions
17, Apr 2000	finish 2nd prototype
24, Apr 2000	Trip to NZ, review designs
01, May 2000	start 3rd eva prototype molds
08, May 2000	complete 3rd prototype molds
15, May 2000	start 3rd handmade models
22, May 2000	finish 3rd handmade models, start 3rd prototypes
29, May 2000	finish 3rd prototypes
05, Jun 2000	ship 3rd models to TRG
12, Jun 2000	prototype review, start final frame drawings
19, Jun 2000	confirm final drawings, open production molds
26, Jun 2000	molds in process
03, Jul 2000	molds in process, start final samples
10, Jul 2000	molds in process, final samples in process
17, Jul 2000	production molds completed, final sample in process-begin testing handle
24, Jul 2000	final samples in construction-test entire piece
31, Jul 2000	final OR samples in completion stage-tcomplete testing of entire piece
07, Aug 2000	21 samples received for OR show (7 each of 3 color ways)
07, Aug 2000	Production begins on or before

Prepared by: David Mittleman
c:jovialphoenix/bpowtimeline041000

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